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Economic, Social and Health Impacts of the Pandemic on Vulnerable Groups in the United-States, Canada and Mexico

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INTRODUCTION TO SPECIAL ISSUE ON COVID-19

Lori Wilkinson, PhD, is Professor of Sociology at the University of Manitoba. She holds a Canada Research Chair in Future Migration (2021–2028). Her research program focuses on the integration experiences of newcomers to Canada, with a particular interest in refugee families. She recently received the Dr. and Mrs. Ralph Campbell Award for Community Engagement from the University of Manitoba (2019) and the Metropolis Canada Award for Research Excellence (2021).

Despite numerous declarations that the coronavirus pandemic is finally "over", illnesses, hospitalizations, and deaths continue. In early June of 2023, the USA was reporting 103,436,829 cases of COVID-19, with 1,131,439 deaths in the United States[1] (WHO, 2023). In Canada, the government reported a total case count of 4,684,456 and 52,751 deaths as of June 2023 (Government of Canada, 2023). In Mexico, the number of lab-confirmed cases of COVID-19 is 7,621,062 (WHO, 2023b), though we believe this is a significant undercount (see Latapi and Cruz, 2023).

Like most respiratory illnesses, COVID-19 is seasonal and geographic, with cases generally declining in the warm summer months and increasing in the cold winter months. We already know that coronavirus is not an equal opportunity killer and that people living in low-income neighbourhoods, crowded houses, are members of racialized groups, and who are Indigenous persons or immigrants experienced much higher rates of COVID-19 infection, hospitalization, and mortality (Government of Canada, 2022; Karmakar, 2021; McDaniel & Gaszo, 2021; Millan-Guerrero, 2020). As I prepare this introduction, media stories, government press releases and tourism ads proclaim that our countries have reopened, and the world is "back to normal". Yet are we really "back to normal"? International borders closed and migration worldwide all but ceased for approximately 18 months. Several international airports and air carriers worldwide have reported systemic computer failures, staff shortages, striking pilots, and disgruntled customers (Prisco, 2023; CBC, 2023). On the economic side, supply chain disruptions, shortage of qualified workers, rising inflation, and scarce housing have plagued most nations (Macklem, 2023; U.S. Bureau of Labour Statistics, 2023; Trading Economics, 2023). In healthcare settings, there are reports of burnout, stress, and labour shortages abound (U.S. Chamber of Commerce, 2023). More broadly, the much-anticipated mass retirements of the "Baby Boomers" predicted decades ago happened swiftly once the reality of the pandemic set in (Hertz, 2022). Amongst the younger generations, disruptions to school and steep increases in the cost of living meant many decided to prolong their post-secondary schooling or upended their career and family planning in ways that may never be recoverable (Layton, 2022). Newcomers and Indigenous peoples from all over the continent suffered disproportionately from the effects of the pandemic, and we will learn more about their experiences in this special issue.

Indigenous peoples in all three countries were extraordinarily affected socially, economically and physically by the pandemic and its related restrictions. The Navajo Nation, for instance, was significantly affected by the pandemic early on,

1 Note that the CDC stopped tracking cases on May 11, 2023 (CDC 2023).

with large numbers of hospitalizations and deaths among its members. In Canada, First Nations communities, especially those in remote northern regions, found themselves without adequate PPE (Personal Protective Equipment) and had to wait for vaccinations, even though the government promised to prioritize them. The Premier of Manitoba, Brian Pallister, indicated that prioritizing vaccines for Indigenous peoples was tantamount to putting Manitoban citizens in second place (Broadbeck, 2020) waiting for the vaccine.

In this special issue of *Canadian Diversity*, researchers address some of these questions in a North American context. As we are all painfully aware, the pandemic did not obey international borders. Despite nearly ending international movement for many months, the pandemic spread like wildfire over great distances. Our countries had similar, yet different approaches to the pandemic. While the experiences of Canada and the United States are often compared, Mexico is very often ignored. In fact, unlike other continents, Mexicans, Americans and Canadians tend not to see themselves as members of a single entity. Our governments, until very recently, rarely considered our three countries in contexts other than economic trade and international borders.

The papers collected in this special issue are the result of a CIHR-funded[2] three country examination of the socioeconomic and mental health outcomes of Indigenous peoples, newcomers and racialized persons in Canada, USA and Mexico. Our goal was to understand the long-term impact of the pandemic on our three countries together. Just as the pandemic disregarded borders, so did we. As we learned more from one another, we understood how interconnected our communities really are. Together, we have a deeper appreciation of how similar our experiences have been, despite our geography.

Monkman and his team (2023) discuss the important, but often ignored issue of Indigenous sovereignty and health. In their article, the team discusses how various Indigenous communities across Canada not only responded to the pandemic but used the experience to strengthen their local health authorities. In Clifford and her colleagues' paper (2023), they describe the influence that trust in state government, Indigenous community government, and faith leaders had on vaccine uptake among Indigenous peoples in Canada and the USA.

Jack Jedwab and Min Zhou (2023) conduct a different analysis regarding trust and the pandemic. Their paper examines the connection between declining trust and increasing rates of discrimination in Canada and the USA. Both countries experienced increases in various types of perceived discrimination coupled with plummeting rates of trust, particularly in government entities. Contrary to previous research, it is not diversity that decreases trust but rather experiences of discrimination that cause communities to mistrust one another.

Jedwab and Zhou's second contribution examines the relationship between vaccine status and political ideology between Canada and the USA. While fewer Americans overall have been vaccinated, when political ideologies are introduced, the differences become much smaller. They find that although persons who indicated their politics were 'very right' were less likely to be vaccinated in both countries, vaccination rates among right leaning voters in Canada were about 5% higher than in the USA. Among voters indicating they were centrist politically, the difference in vaccination rates was higher, with 92% of centrists in Canada indicating they have taken the COVID-19 vaccination compared with 75% of Americans with similar political ideologies.

Differences in vaccination status between Americans and Canadians who indicate they are left leaning ideologically are small, at a five percent difference between the two countries. In summary, political ideologies matter in terms of vaccination uptake.

Financial vulnerability among Canadians is the topic of Shrestha and Holley's (2023) article. With the widespread closure of borders and businesses, it was not surprising to find Canadians who were financially insufficient. Although the Canadian government introduced several income supports during this time, this confirmed that financial instability is a long-term problem, particularly among racialized groups. Using data collected from our CIHR-funded survey, this team reveals that racialized newcomers, especially those who are young and living in the western provinces, had the worst economic outcomes during the pandemic. Our data allows us to look at the United States and Mexico using similar measures, and we look forward to conducting this research in the future.

Looking to Mexico, colleagues Latapi and Cruz (2023) examine the health system's response to COVID-19. One interesting, though perhaps not surprising finding, is that official reports of COVID-19 cases in Mexico varied drastically from individual reports of the illness. According to official statistics from Mexico, the case rates of COVID-19 were significantly lower than rates in the USA and Canada (Latapi and Cruz, 2023). Anecdotal reports and results from our survey suggest that the incidence of the illness is much higher. They suspect that government reports undercount disease incidence of

2 CIHR grants received: 2020-448105 and VS2-175571. Other funding (including in-kind) Mitacs, University of Manitoba Vice President Research and International, Leger Marketing and the Canada Research Chairs Fund (Migration Futures and Miyo we'citowin, Indigenous Governance and Digital Sovereignties)

marginalized communities – exactly the population of concern in our study. Mexico's "broken" health care system is also cited as another reason for differing report rates.

In Jedwab's (2023) article, he compares the public opinions among Americans and Canadians regarding immigration amid the pandemic. His findings reveal that both Americans and Canadians remain relatively strong and similar in their regard towards migration, even during the pandemic. Compared with other similar countries, the USA and Canada had higher levels of support for migration. It seems that both countries have rather robust and long-term support for immigration, but recent events remind us that the support is fragile.

Finally, Pinero and Ibarra (2023) examine a unique group of people, refugees along the US/Mexico border. Through their interviews with a variety of would-be asylum seekers, Pinero and Ibarra find that the psychological experience of waiting in indefinite limbo due to US border restrictions instituted under Title 42 led to significant stress among the refugees. When interviewed, gaining entry to the USA was a priority for most refugees. They would worry about the pandemic later. This meant that large numbers of refugees went unvaccinated, living in cramped and sometimes unsanitary quarters. From an individual perspective, the pandemic became just another border they needed to cross before making their dreams come true.

We hope that this collection of research articles piques your interest and addresses some of the major gaps in our knowledge about COVID-19 and inequalities in Canada, the USA and Mexico.

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EXTRA

Readers are likely asking themselves, "who needs to read (yet another) series of articles on the pandemic of 2020?" This is not a casual question, since March 2020, over 5,340,000 academic articles have been written on various aspects related to COVID-19 worldwide. Most of these articles have been published in Canada and the United States. In Canada, 2,810,000 articles have been published (or published by researchers in Canada). In the USA, 2,660,000 articles have been published. In Mexico, over 418,000 academic articles have been published (Google Scholar, 2023)[3]. Despite the rapid proliferation of academic research on all aspects of the COVID-19 pandemic, we are left with more questions than answers.

3 Search terms were: COVID-19 and "Canada", "United States" and "Mexico". A fourth, single term search, was conducted using only the term "COVID-19".

TAKING CONTROL OF INDIGENOUS COMMUNITY HEALTH: STEALTH SOVEREIGNTY DURING THE COVID-19 PANDEMIC

Alicia Clifford is a white settler Ph.D. candidate in the department of Health, Aging and Society at McMaster University. They stand in solidarity with and work alongside Indigenous women to explore what healing, health, and well-being mean in prison from the perspective of those with lived experience. Alicia wants their privilege to serve those targeted by the legal system because there is no justice system in the settler colonial state of Canada, only a legal one.

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Dane Monkman is a member of Peguis First Nation and who was raised in the Canadian north on the Great Slave Lake and the lands of the Deh Cho Dene peoples. Dane's research is focused primarily on Indigenous governance and Canadian political economy, Treaty Governance and material political dynamics arising from Treaty number 1.

Sally Ogoe was a postdoctoral fellow on a CIHR-funded study of the social, economic and mental health outcomes of newcomers in Canada, USA and Mexico and is currently a Senior Research Associate at the University of Winnipeg on a multi-year refugee employment project. Her research interests includes immigration and integration, gender-based research with focus on women and children, racism and human rights issues, as well as policy development.

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Lori Wilkinson, PhD, is Professor of Sociology at the University of Manitoba. She holds a Canada Research Chair in Future Migration (2021-2028). Her research program focuses on the integration experiences of newcomers to Canada, with a particular interest in refugee families. She recently received the Dr. and Mrs. Ralph Campbell Award for Community Engagement from the University of Manitoba (2019) and the Metropolis Canada Award for Research Excellence (2021).

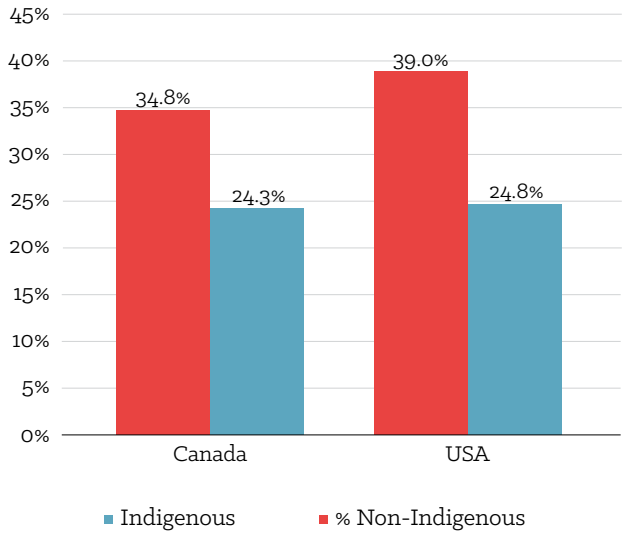
INTRODUCTION

The COVID-19 pandemic was a strain on Indigenous communities across the board, and this strain was not only on individual capacity but also on institutional resilience. Dangers posed by the pandemic were heightened by the vulnerable precarity that settler colonialism has imposed upon Indigenous Peoples. For First Nations in particular, the federal law and policy has treated them as wards of the state for generations, disrespecting their distinct nationhood. These governments are often given little autonomy compared to the other entities in Canadian federalism, despite contemporary discourse and policy shifts that give lip service to increased self-determination and self-government. Sometimes lost in the pandemic analysis is that times of unrest such as these are of interest, and of consequence, for Indigenous nations as nations. In effect, Indigenous communities have long had to come together to weather a variety of crises, including other pandemics. This article therefore focuses on how Indigenous nations took control of their community health and their pandemic response in a variety of ways, reanimating pathways to the resurgence and reassertion of sovereignty.

SOCIAL DETERMINANTS OF HEALTH, POLITICAL DETERMINANTS OF HEALTH?

In Canada, overall health remains poorer for Indigenous Peoples, despite Canada being one of the healthiest countries in the world (Gabel et al., 2017). Many health inequalities are directly linked to social, political, and economic disadvantages connected directly to ongoing settler colonialism (Downey, 2020). Disparities include socioeconomic status, housing, employment, education, environmental hazards, access to health services, and food insecurity, to name a few. For example, access to clean, potable water is something many take for granted and is an essential component of human existence necessary to curb the spread of viruses. Nevertheless, roughly 20–30% of First Nations communities continue to face water insecurity, with a significant number still experiencing water advisories and high-risk water systems. Over half of these have lasted more than a decade, making the communities acutely susceptible to a variety of health-related issues (Bharadwaj & Bradford, 2018; Luo, 2021). The COVID-19 pandemic has amplified and compounded many of these disparities (see Figure 1). For example, Indigenous Peoples in Canada and the United States have been more likely than non-Indigenous respondents to be affected by food security during the COVID-19 pandemic. However, while there are determinants of health that pose a higher risk for COVID-19, Indigenous communities are engaged and taking the lead to secure the health and safety of their people.

FIGURE 1. COVID-19 IMPACT ON MEETING BASIC FOOD REQUIREMENTS, WAVE 4, 2022 (N=1748).



Nevertheless, it is our contention that the social determinants of health that affect Indigenous Peoples negatively in Canada are just as much *political* as they are social, flowing from constitutional complexities and harmful settler colonial practices that stretch back for generations and continue to this day. Currently, healthcare in Canada is delivered through a patchwork of services that create a complex maze for on-reserve/off-reserve or remote/urban Indigenous Peoples to navigate (Gabel et al., 2017). The labyrinth connects directly to the division of legislative powers outlined in sections 91 and 92 of *the Constitution Acts, 1867 to 1982*. Under section 91(24), the federal government is responsible for "Indians, and Lands reserved for the Indians," including healthcare. In contrast, section 92(7) dictates that provincial legislatures are responsible for establishing and delivering healthcare services. The division of powers means that the current funding models for First Nations, Métis, and Inuit Peoples' services remain distinct (Gabel et al., 2017; Lavoie et al., 2011; Nelson & Wilson, 2018). With federal services and coverage offered for status First Nations and Inuit by the First Nations and Inuit Health Branch (of Indigenous Services Canada, but formerly of Health Canada), Indigenous recipients of the benefits were at risk of being caught between provincial-federal jurisdictional disputes over responsibility for coverage—sometimes with deadly consequences. This was the case until 2007, when the federal government adopted Jordan's Principle, named for Jordan River Anderson, a five-year-old Cree boy from Norway House Cree Nation who died in hospital while the federal government and the Province of Manitoba argued over who was responsible for coverage of his home care (Blackstock et al., 2005). Furthermore, under this model, the federal government maintains a separate pricing scheme related to healthcare costs which may not equal what the provinces pay to administer healthcare services. Not only are there price

differences, but this is further complicated by identity as not all Indigenous groups are treated the same (i.e., status vs. non-status First Nations, Métis, Inuit). The result is that healthcare funding between Indigenous and non-Indigenous Peoples is unequal, with significant differences in coverage and services. As a result, Indigenous People end up short-changed, widening gaps in health further.

STEALTH SOVEREIGNTY: COMMUNITIES TAKING CONTROL OF INDIGENOUS HEALTH AND SAFETY

Despite all of this, an ongoing area of research that is of interest to us centres on those areas in which Indigenous Peoples, and Indigenous governments, exercised agency in the heated moments of the COVID-19 pandemic. Settler colonialism's dispossession of Indigenous Peoples, along with the dismantling of Indigenous sovereignty and governance systems, have no doubt resulted in contemporary conditions that make it all the more challenging for Indigenous nations to rise to the challenge posed by the COVID-19 pandemic. Seeking to exercise sovereignty in order to protect the health and well-being of Indigenous people was not necessarily accomplished through grand gestures such as media and political campaigns, jurisdictional legal battles, or stand-offs with law enforcement and Canadian military reminiscent of those witnessed in the 1990s (e.g. the Oka Standoff, Ipperwash). During the pandemic, Indigenous sovereignty has arguably manifested more *in practice* than in official forms of settler state recognition, a quiet shift whereby Indigenous governments were compelled to act to protect their communities and to protect themselves from the costs of inaction—costs which could be counted in dollars, in the social harms of prolonged lockdowns, or in the lives of community members.

While federal and provincial levels of government, both with much more institutional capacity than Indigenous governments, were slow to respond to the public health crisis during the uptake and have since been quick in their 'return to normal,' First Nations have been making tough but much more time-sensitive decisions in regards to the protection of the community and individual health. This also comes after the experience of previous public health crises, such as the H1N1 influenza virus in 2009. As was reported at the time, many First Nations were left without support from the Canadian government, offering a critical lesson for First Nations. The federal government's moves to offer relief for the deceased during H1N1—in the form of bodybags shipped to some First Nations—rather than support for the living, made headlines (CBC News, 2009). The poor infrastructure and lack of support from the federal government have not been forgotten and subsequently forced First Nations to build capacity where its absence could be expected. Many First Nations have developed policies, protocols, and practices—based primarily on the protection of their members and the protection of the community—regardless of the provenance of funding, support, or permission from settler governments.

As one example, Peguis First Nation in Manitoba put in place stricter social distancing guidelines for its members than were employed by the provincial or federal governments, while offering extended support and tracking of cases within the community. Enforcement was also something managed internally by the First Nation. Frequently updated statistics, multiple in-community vaccine clinics and incentives, financial support and food hampers for those impacted by lockdown (Peguis First Nations, 2022) were extensions of the nation's sovereignty and included ways to self-determine their response to the ongoing pandemic.

Other Nations, such as Samson Cree Nation in Alberta, devised protocols to keep community members safe without any contact, spread information through frequent newsletters and fostered community during the pandemic by having distanced and safe food drives and events (Samson Cree Nation, 2022). Empowered collection and sharing of information, engagement with the community, and strict rules put in place by the community's government not only helped the nation's well-being during the crisis but also increased capacity within the community when it was not offered elsewhere.

An example of built capacity can also be found in Moose Cree First Nation in Ontario, where the First Nation implemented its own system of tracking and reporting cases. In this nation though, the response to the crisis went beyond tracking and sought to build capacity to prevent the spread. Moose Cree First Nation set aside 'Isolation Units', which the community made available for families and individuals who tested positive or were of higher risk (Moose Cree First Nation, 2022). This capacity is one which many communities, both Indigenous and non-Indigenous, could have benefited from.

While not a First Nation government regulated under the *Indian Act*, the Manitoba Métis Federation, in its struggle to ensure the wellbeing of its members during pandemic lockdowns and under the exclusionary pandemic policies of the provincial government, put in place its own educational supports for Métis children under lockdown (Manitoba Métis Federation, 2020) and actively sought to procure and distribute its own COVID-19 vaccines to MMF citizens (Manitoba Métis Federation, 2021).

TRUST AND SETTLER COLONIALISM

Trust is a complex and multifaceted concept that can suggest a range of meanings, from trust between individuals to trust in society's institutions and systems (Merriam-Webster, n.d.). It is also considered an essential component of social

wellbeing and governance and involves the hope that individuals, communities, or institutions will act positively (OECD, 2017, 2019). There are many layers to trust, making it difficult to measure. However, we all know what it feels like when it does not exist. So, what precisely happens when trust intersects with settler colonialism?

Many ascribe colonialism to the past, failing to recognize how it is very much interwoven through the institutions, structures, laws, and policies that remain in place today (Lowman & Barker, 2015; McCallum & Perry, 2018; Wolfe, 1999, 2006; Woolford, 2014; Woolford & Gacek, 2016). Settlers arrived and have not left what is now called Canada. More importantly, colonial laws and policies remain intact. The *Indian Act* is not some long-forgotten document. It is an active piece of Canadian legislation that dictates the relationship between Indigenous Peoples, specifically First Nations, and the federal government, including how nations govern themselves. The state exerts power through formal legislation to control and dominate Indigenous Peoples and their territories (Lawrence, 2003). Doing so demonstrates that settler colonialism remains alive and entrenched within Canada's institutions that attempt to enfold Indigenous Peoples into the dominant settler colonial systems that target them (Woolford, 2014; Woolford & Gacek, 2016). It should perhaps come as no surprise, then, that our study demonstrates that Indigenous Peoples in Canada have lower levels of trust in the federal government than do their non-Indigenous counterparts (see Figure 2). Moreover, their levels of trust are higher for their local Indigenous community leaders (see Figure 3).

While Indigenous Peoples in Canada are less likely to trust the federal government than non-Indigenous respondents, trust levels have dropped slightly less for Indigenous respondents (15.4%) than non-Indigenous respondents as the pandemic has progressed, with the latter group seeing a drop of 18.3% in trust in the federal government since wave 1 of the survey. A slight increase between waves two and three can be seen in both groups.

Interestingly, Indigenous respondents between 25 and 34 years of age scored as less trusting in Indigenous community leaders than other age groups. While it is a 50/50 split for those between 25–29 years, those between 30–34 years are almost 20% less likely to trust community leaders. However, one must not ignore the fact that the most significant damage wrought upon Indigenous governance systems has been that imposed by settler colonialism. Many Indigenous communities are forced to manage themselves in conditions of imposed immiseration and under *Indian Act*-imposed governance systems, while their traditional forms of governance have been disregarded. The question of whether these conditions pose challenges to Indigenous community members' trust in Indigenous governments is one that merits further research. In addition, further exploration would be beneficial to understand whether this is an anomaly or a significant issue within this age group specifically. For those 35 years of age and older, trust in community leaders continues to increase throughout the rest of one's life.

FIGURE 2. TRUST IN THE FEDERAL GOVERNMENT OVER TIME (N=11,195) WAVES 1-4, 2021-2022.

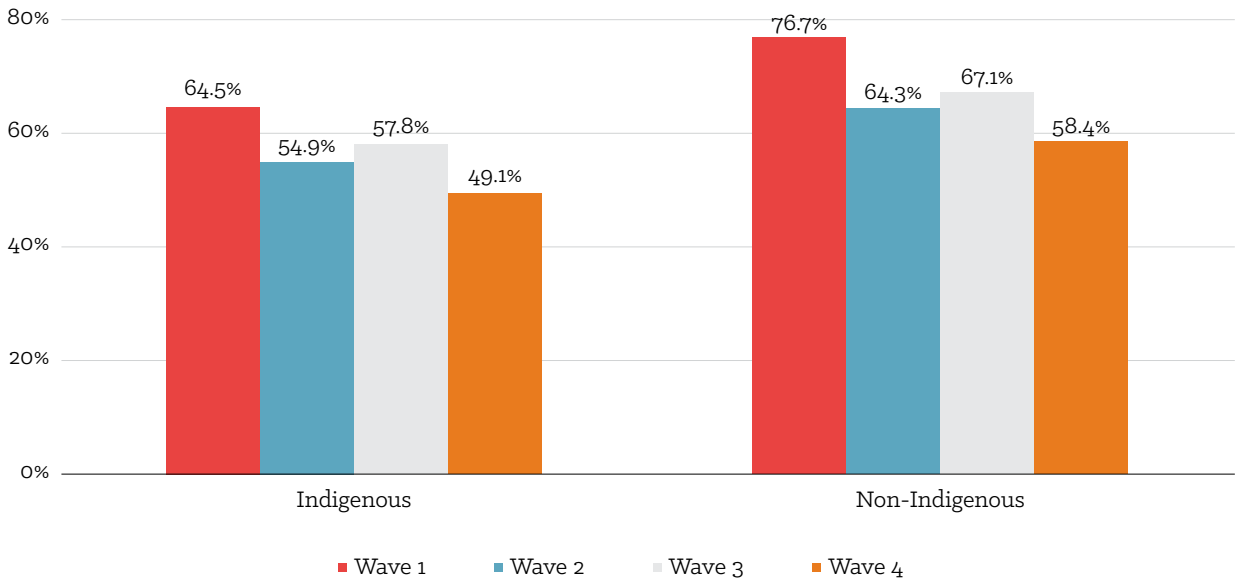
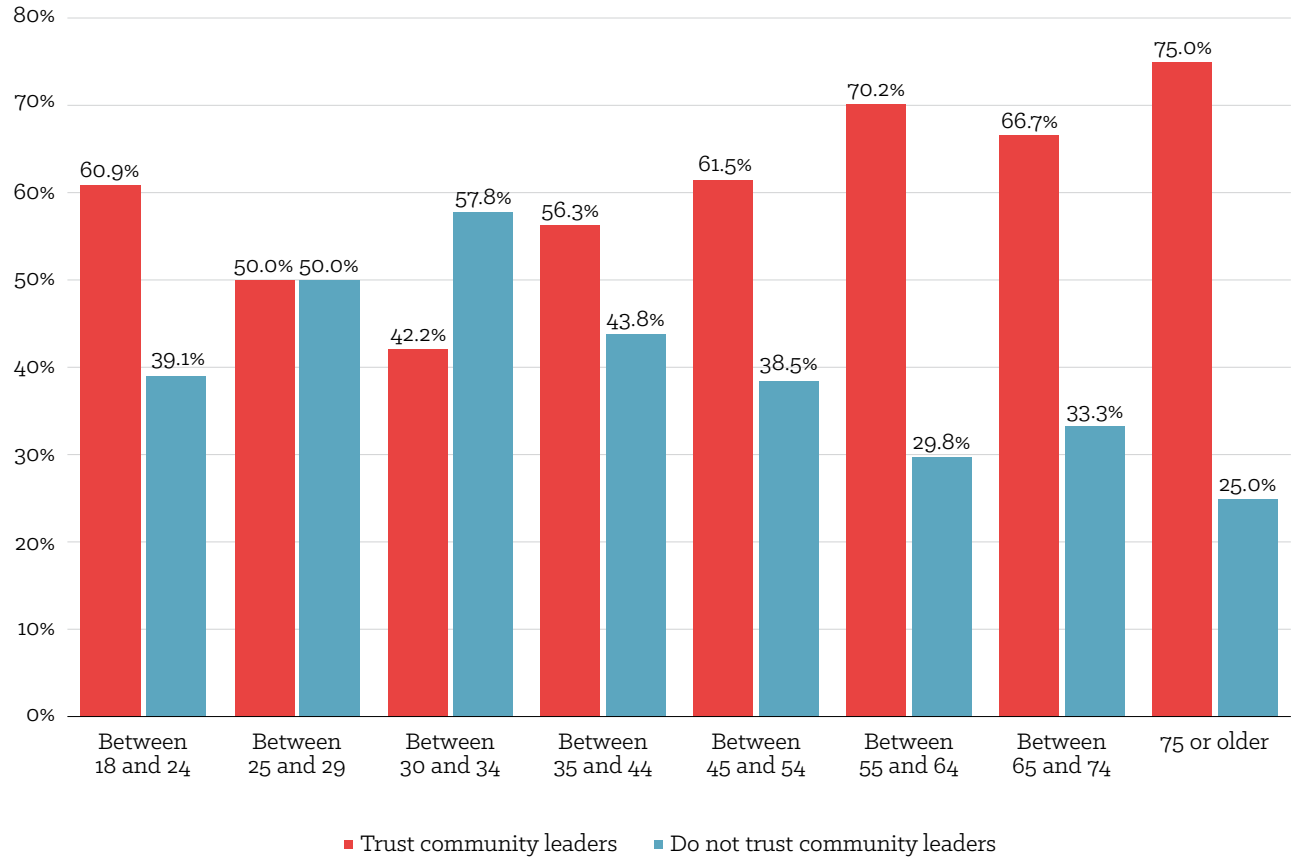


FIGURE 3. TRUST IN COMMUNITY LEADERS DURING WAVE 4 (N=455)



CONCLUSION

While many of the protective practices and protocols put in place by Indigenous governments often come at a cost to the nation itself, these decisions were made by the nations concerned rather than imposed upon them. However, taking a proactive stance during the pandemic allowed for the stealthy move towards greater self-determination. As Indigenous communities have done in several hundred years of pandemics, they came together for mutual support and protection. Pandemic response activities can be conceived of as nation-building activities. Sovereignty is not just a matter of recognition (from settler states or the international community), it is also a matter *of doing*. There are challenges associated with this, of course, such as building new capacities and community-based institutions, fighting stigma and misinformation, and deciding where community wellbeing intersects and interacts with a nation's external relations. The urgent needs of many Indigenous communities as they faced yet another pandemic served as a call for many Indigenous governments to rise to these challenges and put sovereignty into practice, quickly and without fanfare.

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EVOLVING TRUST AND RISING DISCRIMINATION DURING THE COVID-19 GLOBAL PANDEMIC IN THE UNITED STATES AND CANADA

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INTRODUCTION

The Edelman Trust Barometer (ETB) revealed that in the midst of the global pandemic in 2021 there emerged a "widespread mistrust of societal institutions and leaders around the world" and further observed in 2022 that people around the world, especially in democracies, increasingly faced a failing trust ecosystem.[1] The 2022 ETB showed that the overall trust index declined 5 percentage points in the US, and 3 in Canada from 2021 to 2022. Wu and associates recently found that a substantial portion of the Canadian population experienced declines in social trust, especially in neighborhood trust amongst socioeconomically disadvantaged, during the pandemic.[2]

Trust has long been considered a key element in building social capital and strengthening democracy.[3]While generalized trust — trust towards people in general — helps to promote group solidarity in the face of adversity, a breakdown in such trust is widely viewed as a cause of fragmentation thus undermining social cohesion. Over the period 2020–2022, the response to the COVID-19 global pandemic highlighted the importance of trust in people and institutions so as to ensure adherence to health measures, such vaccination, mask wearing, and social distancing, aimed at combating the spread of the virus.

Researchers often measure levels of trust across societies by asking citizens about trust in people, neighbors, fellow

1 For detail of the 2021 and 2022 ETB reports, see www.edelman.com/trust/2021-trust-barometer; www.edelman.com/trust/2022-trust-barometer.

2 Wu, C., A. Bierman, and S. Schieman (2022) "Socioeconomic stratification and trajectories of social trust during COVID-19." *Social Science Research*. PMCID: PMC9186426.

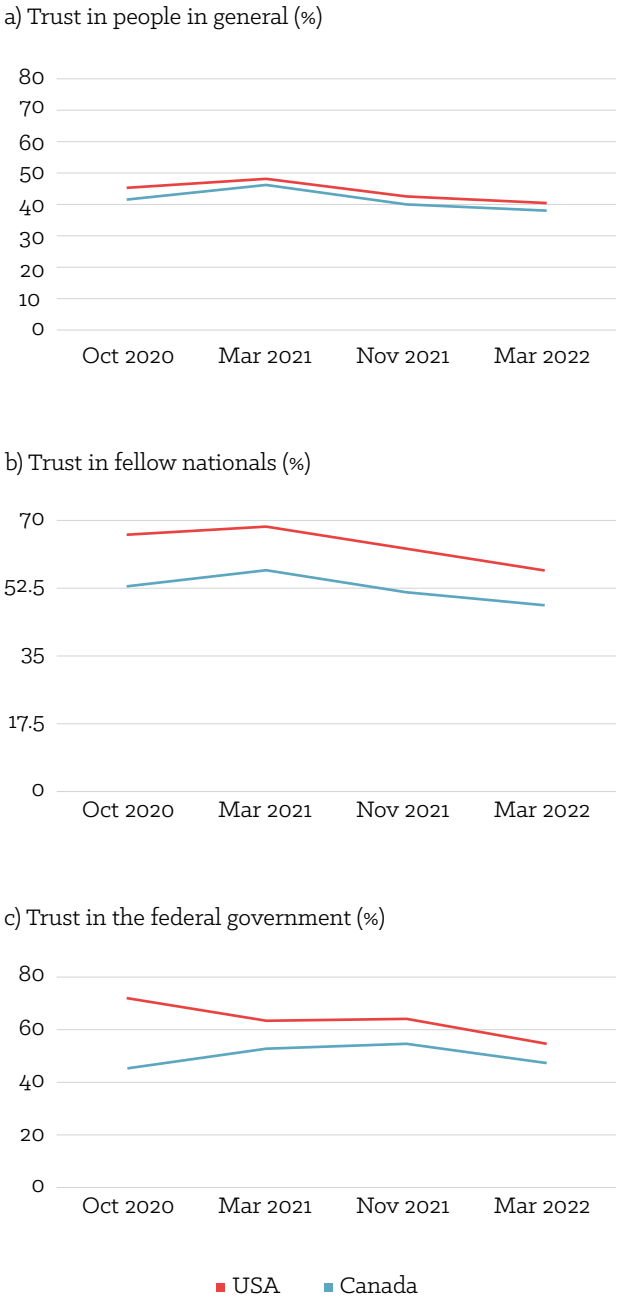
3 Putman, R. D. (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

citizens, nonprofits, and private and public institutions. This essay reports findings from four waves of Leger survey data from October 2020 to March 2022[4] that analyze the evolving levels of trust and patterns of rising discrimination in the US and Canada during the first two years of the pandemic. We first examine the trends of the trust towards people in general, trust towards fellow nationals, and trust towards the federal government. We also contrast the levels of trust towards people in general, fellow nationals, and the federal government amongst different social groups by ethnoracial identity, those self-identified as White, Black, Hispanic/Latin American, or Asian American/Chinese Canadian.[5] Third, we further examine whether people are generically trusting or whether they experience certain types of trust that may be in opposition to each other. For example, are those more trusting toward fellow nationals less trusting towards their government? Finally, responding to growing anti-Asian racism in the US and Canada during the pandemic, we zoom in on Asian Americans and Chinese Canadians to examine the relationship between trust and discrimination. In particular, we look at the extent to which Asian Americans/Chinese Canadians who had experienced discrimination reported a decline in trust. By examining this relationship, we seek to provide insight into observations made by Robert Putnam and others that generalized trust is threatened by a society's cultural diversity.[6]

ESTABLISHING TRUST: TRUST TOWARDS PEOPLE IN GENERAL, FELLOW NATIONALS, AND THE FEDERAL GOVERNMENT

Figure 1 demonstrates the evolving trends of trust. Between October 2020 and March 2022 (coinciding with a second peak of the contagion), trust towards people in general, in fellow nationals, and in the federal government ended up declining. However, the decline in trust was not linear in both the US and Canada. The trends did not show a straight line of descent across the period under study. In both countries, between October 2020 and March 2021, there was a marked increase in trust towards people and fellow nationals; but over that same period, trust towards the federal government diverged between the two countries—increasing in the US while falling in Canada. From March 2021 to November 2021 the degree of trust towards people in general and fellow nationals fell in

FIGURE 1. EVOLVING TRUST TOWARDS PEOPLE IN GENERAL, FELLOW NATIONALS, AND THE FEDERAL GOVERNMENT IN REGARD TO COVID-19/CORONAVIRUS IN THE UNITED STATES AND CANADA.



Source: Leger survey data (Appendix 1).

4 Four waves of survey data were collected in the United States and Canada by the firm Leger during the months of October 2020, March 2021, November 2021 and March 2022. For methodology and other detail, see Appendix 1.

5 We choose to use the term "ethnoracial" identity for brevity to reflect on the possible overlap of race and ethnicity and acknowledge that the Canadian census uses the term visible minority while the US census uses the term race. In the Leger surveys, the selected groups are self-identified as White, African American/Black, Asian American, and Hispanic/Latin American in the US; the groups are White, Black, Chinese Canadian, and Latin American in Canada.

6 Putnam, R. D. (2007). "E Pluribus Unum: Diversity and community in the twenty-first century the 2006 Johan Skytte prize lecture." *Scandinavian Political Studies, 30*(2), 137–174; Achbari, W., M. Gesthuizen, and J. Holm (2018) "Ethnic Diversity and Generalized Trust: Testing the Contact Hypothesis in Dutch Voluntary Organizations." *Nonprofit and Voluntary Sector Quarterly, 47*(4), 813–835.

both countries but there was a slight increase in the degree of trust in the federal government. The period between November 2021 and March 2022 witnessed the decline across all categories and in both countries, with a steeper fall regarding the trust towards the federal government.

Despite the overall declining trends in both countries, Figure 1 points to a slightly greater degree of trust towards people in general in the US when compared with Canada. However, the degree of trust amongst Canadians is markedly greater than that amongst Americans when it comes to trust towards both fellow nationals and towards the federal government. Nonetheless, there is a much greater gap between trust towards people in general and trust towards fellow nationals in the US (less than 10 percentage points) than there is in Canada (19–25 percentage points). These evolving trends remind us just how fluid trust can be.

DIFFERENCES IN TRUST ACROSS SELECTED ETHNORACIAL GROUPS

We now shift our focus to the degree to which major ethnoracial groups in the US and Canada, respectively, trust people in general and fellow nationals based on results from the fourth wave of the Leger survey (March 2022). As Table 1 shows, the patterns of trust towards people in general and fellow nationals, as well as the gap between these two types of trust, closely reflect those seen on a national scale. Regardless of race, trust towards fellow nationals is higher than trust towards people in general. In the US, Hispanics are most trusting towards both people and fellow nationals while whites are least trusting towards people in general. For each of the ethnoracial groups in the US, the differences in their levels of trust towards people and fellow nationals are relatively small, ranging from a low of 2 percentage points amongst Asian Americans to a high of 9 percentage points amongst Whites. In Canada, in contrast, Blacks are the most trusting towards fellow nationals but the least trusting towards people in general; and the gaps are much wider across groups, especially for Blacks (26 percentage points).

When we consider the level of trust towards the federal government by ethnoracial groups in the two countries, there is some variation across the groups. Hispanics displayed the highest level of trust across all groups in the US in contrast with their Canadian counterparts who showed the lowest level of trust. Chinese Canadians exhibited the highest level of trust towards the federal government across all groups in both countries and with Asian Americans who also displayed a relatively high level of trust.

TABLE 2: TRUST TOWARDS THE FEDERAL GOVERNMENT IN REGARD TO COVID-19 BY SELECTED ETHNORACIAL GROUPS IN THE UNITED STATES AND CANADA

Trust toward the federal Government "a lot" or "somewhat," March 2022	United States	Canada
Total	47.7	55.1
White	46.6	51.9
African American / Black	54.5	51.9
Asian American / Chinese Canadian	57.7	**68.6**
Hispanic / Latin American	**60.2**	48.2

Source: Leger survey data, fourth wave, March 2022.

TRUST TOWARDS FELLOW NATIONALS V. TRUST TOWARDS THE GOVERNMENT

A study by Pew Research concludes that "people's views on personal trust are strongly associated with their views

TABLE 1: TRUST TOWARDS PEOPLE IN GENERAL AND FELLOW NATIONALS IN REGARD TO COVID-19 BY SELECTED ETHNORACIAL GROUPS IN THE UNITED STATES AND CANADA RESPECTIVELY

Trust "a lot" or "somewhat," March 2022	United States			Canada		
	People in General	Fellow Nationals	Gap	People in General	Fellow Nationals	Gap
White	39.9	48.9	9	38.9	57.6	18.7
African American / Black	44.3	51.0	6.7	36.2	62.0	25.8
Asian American / Chinese Canadian	41.3	43.6	2.3	36.3	54.1	17.8
Hispanic / Latin American	53.7	59.1	5.4	44.1	57.5	13.4

Source: Leger survey data, Fourth wave, March 2022.

on issues related to institutional trust."[7] In effect those who report high trust in people tend to have significantly more confidence in institutions than do persons with low trust in people, whether it is the military or police officers, business executives, or religious leaders, as table 3 shows.

In the previous sections, we found that our survey respondents, regardless of ethnoracial backgrounds, generally displayed higher trust towards their fellow nationals than towards people in general. Table 4 reveals that those who are more trusting of their fellow nationals are much more likely to trust the federal government when it comes to the COVID-19.

ANTI-ASIAN RACISM DURING THE GLOBAL PANDEMIC

Government statistics have consistently revealed a significant rise of anti-Asian hate crime since the pandemic outbreak. In the United States, the Federal Bureau of Investigation's 2020 FBI Hate Crime Statistics showed a 76% rise in the number of reported hate crimes against Asian Americans, the highest level in recent decades.[8] In Canada, Statistics Canada released a study in August 2022 pointing to a marked increase in reported hate crimes between 2019 to 2021 (a rise of 72 percent over that period).[9] During these two years, there were unprecedented increases in the number of hate crimes reported by persons identifying as East or Southeast Asian, from 67 in 2019 to 305 in 2021.[10] Generally such figures in both countries are small compared to the overall number as reflected in public opinion surveys because the vast majority of persons do not report potential hate crimes to the police.

TABLE 4. THE EXTENT TO WHICH RESPONDENTS TRUST FELLOW NATIONALS BY THEIR TRUST TOWARD THE GOVERNMENT "A LOT" IN REGARD TO COVID-19/CORONAVIRUS IN CANADA AND THE UNITED STATES.

March 2022	Trust towards the federal government "a lot"	
The extent to which respondents trust fellow nationals	Canada	United States
A lot	71.4%	**75.8%**
Somewhat	63.9%	58.6%
Not a lot	44.3%	40.2%
Not at all	32.9%	**22.5%**

Source: Leger survey data, fourth wave, March 2022.

Table 5 reveals consistent evidence of rising anti-Asian racism based on the third wave of the Leger survey (November 2021). As shown, Asian Americans and Chinese Canadians reported higher levels of unfair treatment on the basis of racial/visible minority status compared with other ethnoracial groups examined here since the outbreak of the pandemic.

Other recent studies in the US and Canada confirm the rise in the experience and expression of hate towards Asian

TABLE 3. THE RESPONDENTS' TRUST TOWARDS FELLOW NATIONALS AND THE FEDERAL GOVERNMENT 'A LOT' BY THE EXTENT TO WHICH RESPONDENTS TRUST PEOPLE IN GENERAL IN REGARD TO THE HANDLING OF THE COVID-19/CORONAVIRUS.

March 2022	The extent to which respondents trust people in general			
Trust toward fellow nationals "a lot"	A lot	Somewhat	Not a lot	Not at all
Canada	67.7%	13.2%	3.4%	6.9%
United States	**73.6%**	13.2%	3.6%	**2.7%**
Trust towards the federal government "a lot"	A lot	Somewhat	Not a lot	Not at all
Canada	42.3	17.3	14.0	14.1
United States	**55.4**	13.4	9.0	**5.9**

Source: Leger survey data, fourth wave, March 2022.

7 Pew Research Center (July 2019) "Trust and Distrust in America", p. 38 www.pewresearch.org/politics/2019/07/22/the-state-of-personal-trust/

8 ABC news (Oct 25, 2020) "Hate crimes against Asians rose 76% in 2020 amid pandemic, FBI says" Hate Crime Against https://abcnews.go.com/US/hate-crimes-asians-rose-76-2020-amid-pandemic/story?id=80746198. Also see https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/hate-crime

9 Greg Moreau, "Police-reported crime statistics in Canada, 2021," Canadian Centre for Justice and Community Safety Statistics, August 2, 2022 www150.statcan.gc.ca/n1/pub/85-002-x/2022001/article/00013-eng.htm

10 Ibid.

TABLE 5. REPORTED LEVELS OF UNFAIR TREATMENT BY ETHNORACIAL BACKGROUNDS.

Percent reporting "YES" to the question: Since the outbreak of COVID-19/Coronavirus, have you been treated unfairly on the basis of visible minority/race?		
November 2021	United States	Canada
Total	8.0%	4.5%
White	5.6%	1.1%
African American / Black	14.5%	16.2%
Asian American / Chinese Canadian	**21.5%**	**24.5%**
Hispanic / Latin American	12.6%	2.7%

Source: Leger survey data, fourth wave, March 2022.

Americans/Chinese Canadians. A 2021 Pew Research survey found that Asian adults expressed fear that someone might threaten or physically attack them much more than other racial minority groups. The Pew survey further revealed that a vast majority of Asian adults (81%) said that violence against them was increasing, far surpassing the share of all U.S. adults (56%) who said the same.[11] The Stop AAPI Hate website, a multi-racial coalition against anti-Asian hate launched in March 2020, has recorded a sharp and continuous surge of incidents of anti-Asian racism, ranging from boycotting Asian restaurants, bullying Asian American school children, to verbal or physical assaults of Asian Americans in public places, since the coronavirus outbreak from in 2,100 March 2020 to 11,500 in March 2022.[12] In Canada, similar findings were uncovered by the Toronto Chapter of the Chinese Canadian National Council. The Council's survey found some 943 self-reported racist incidents across the country by Canadians of Chinese origin, a 47-percent increase between January 1 and December 31, 2020.[13]

DO VICTIMS OF DISCRIMINATION REPORT DECLINING TRUST?

One of the key factors that Putman identifies as a possible threat to generalized trust is a society's degree of cultural diversity. In his 2007 essay, he asserted that people living in more demographically diverse areas reported lower levels of trust in their neighbors. He went on to conclude that greater diversity was associated with feelings and behaviors that threatened the sense of community.[14] His thesis raises issues about the factors contributing to the greater distrust in demographically diverse societies. Some may be left with the impression that it is the relationship between ethnoracial groups, or between white and non-white persons, that is the source of distrust. To provide insight into this relationship, we address the question "do victims of discrimination report declining trust" based on the third wave survey findings (November 2021). We focus on Asian Americans and Chinese Canadians to determine whether trust toward people in general, fellow nationals, and the government diminished amongst those reporting being victims of discrimination during the pandemic compared with those that did not experience such discrimination.

TABLE 6. HOW ASIAN AMERICANS AND CHINESE CANADIANS RESPOND TO BEING TREATED DURING COVID-19/CORONAVIRUS.

November 2021	Since the outbreak of COVID-19/Coronavirus, have you been treated unfairly on the basis of race/visible minority status of the following?			
	Asian Americans		Chinese Canadians	
In regard to COVID-19/Coronavirus, I don't trust each of the following:	Not on the Basis of Race (%)	On the Basis of Race (%)	Not on the Basis of Visible Minority Status (%)	On the Basis of Visible Minority Status (%)
Towards People in General	46.9	**56.5**	50.0	**62.2**
Towards Fellow Nationals	42.7	**52.1**	26.7	35.1
Federal Government	29.6	42.5	17.2	23.7

Source: Leger survey data, third wave, November 2021.

11 Ruiz N. G., K. Edwards, and M.H. Lopez (April 221, 2021) www.pewresearch.org/fact-tank/2021/04/21/one-third-of-asian-americans-fear-threats-physical-attacks-and-most-say-violence-against-them-is-rising/

12 https://stopaapihate.org/wp-content/uploads/2022/07/Stop-AAPI-Hate-Year-2-Report.pdf

13 Chinese Canadian National Council Toronto Council (2021) Another Year: Anti-Asian Racism across Canada Two Years into the COVID-19 Pandemic, www.ccnctoronto.ca

14 Putnam, "E Pluribus Unum."

As revealed in Table 6, amongst both Asian Americans and Chinese Canadians, those saying they were "not at all" trusting of people in general were more likely to report being treated unfairly on the basis of their racial/visible minority status than those saying they were not treated unfairly on that basis during the pandemic. Regarding trust toward fellow nationals, however, we see some marked difference: it was Asian Americans who were not trusting of fellow nationals that were more likely to report unfair treatment on the basis of their racial minority status than those saying they were not treated unfairly on that basis during the pandemic. Finally, the data point to important differences in the degree of trust towards the federal government. In effect, those Asian Americans and Chinese Canadians reporting unfair treatment on the basis of their racial/visible minority status were less likely to trust the federal government than those who did not report encountering such treatment.

CONCLUSION

Our analysis so far suggests that discrimination, rather than cultural diversity, undercuts trust in society. Regarding the negative effects of cultural diversity on trust in society, Putnam and others seem surprised to discover that persons living in diverse settings are not only less trusting of people in general but are also less trusting of members of their own community.[15] That observation assumes that trust towards in-group members (in people that share one's own cultural background) inevitably implies lower trust towards out-group members. But that view is not supported by findings from our survey data which show that Americans and Canadians who are trusting of people in general also exhibit more trust towards their fellow nationals as well as their respective federal governments.

In the analysis of levels of trust, societal context matters. To that end we focus on how trust can shift in response to a crisis, in this case the global COVID-19 pandemic, in different countries. We find that the crisis does affect the levels of personal and institutional trust in both countries as well as on cultural communities. We also observe important shifts in levels of trust in the two countries over the course of the crisis between March 2020 and March 2022. It is difficult to ascertain whether the degree of diversity in society had any significant impact on evolving levels of trust. However, it is quite clear from our analysis that trust has declined amongst Asian Americans and Chinese Canadians who experience unfair treatment on the basis of racial/visible minority status. If enhancing trust is a key objective in promoting social cohesion, it follows that combating racism and discrimination against minority groups in the US and Canada can serve to strengthen a society's cohesion and, by consequence, efforts to combat discrimination can help promote trust towards people and their institutions.

APPENDIX 1: METHODOLOGY

Four large-scale surveys were conducted by the firm Leger using their internet panels in Canada and the United States. The surveys were conducted for the Association for Canadian Studies (ACS) and the University of Manitoba with the support of the Canadian Institutes of Health Research (CIHR). The four waves of the survey were fielded between October 2020 and March 2022 with over 26,000 respondents in Canada and the United States with oversamples of persons identifying as Black, Asian/Chinese and Hispanic.

A margin of error cannot be associated with a non-probability sample in a panel survey. For comparison, a national probability sample of 3,000 respondents would have a margin of error of ± 1.9%, 19 times out of 20.

SAMPLE SIZE AND TIMELINE OF EACH SURVEY WAVE

Waves	Wave 1	Wave 2	Wave 3	Wave 4
Timeline	Oct 21–Nov 16, 2020	Mar 3–27, 2021	Sept 2–28, 2021	Feb 10–Mar 10, 2022
Sample size by country				
Canada	2.759	3.070	2.980	2.939
United States	3.551	3.773	3.714	3.734
TOTAL	**6.310**	**6.843**	**6.694**	**6.673**

15 Putnam, "E Pluribus Unum;" Achbari et al., "Ethnic Diversity and Generalized Trust."

IDEOLOGICAL ORIENTATION IN VACCINE UPTAKE DURING THE COVID-19 PANDEMIC

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INTRODUCTION

From the outset of the Covid-19 pandemic, many analysts have focused on such socio-demographic characteristics as age, gender, education, and income as the biggest predictors of behavior in response to mitigation measures and especially in regards to vaccination. Ethnicity, visible minority status, indigenous identification, and immigrant/nativity status have also been considered important factors influencing vaccine uptake (Burke et al. 2021; Mendolia and Walker 2023; Soares et al. 2021; Wong et al 2021). Over the course of the pandemic, a number of studies have revealed that cultural influences/identifiers have played a role in differential rates of vaccination. For example, in the case of persons identifying as Black, Indigenous and across other selected minority identifiers it is widely contended that institutional racism and colonialism have contributed to higher rates of vaccine hesitation in the United States and Canada (Greenwood and MacDonald 2021; Njoku et al 2021). But historic and contemporary socio-cultural considerations aside, political and partisan preferences, also described as ideological orientation, have significant impact as well. In the United States and Canada, where people situate on the ideological spectrum frequently explains whether or not they decide to get a Covid vaccine. And in the case of the United States the substantially lower overall rate of vaccination is at least partially explained by the disproportionately higher percentage of persons situated on the right of the spectrum where there is less vaccine uptake (Fortunato and Lombini 2023).

This paper looks at the extent to which ideological orientation of immigrants and selected minorities in the United States and Canada affects their respective rates of vaccine uptake. We acknowledge that any such cross-country comparison must take into account the important differences in the demographic characteristics of racialized groups in the two countries. Leaving aside the differences in ethno-racial diversity in the composition of American and Canadian Black

identifiers, the former is largely born in the United States while the latter is made up of a large share of the foreign born. We also note that there are differences in the two countries in what constitutes being on the right and differences in views on political issues between those situating themselves on the right.

While our data does not permit us to dive into what it means to be on the right in the United States and Canada nor the deeper diversity of the groups examined here, it nonetheless provides important insights into the important question as to whether national ideological orientation outweighs cultural identification when it comes to vaccination. Our comparative analysis also contributes to a better understanding of some of the factors that have made for greater societal polarization during the pandemic in the United States when contrasted with how such it played out in Canada.

2. BRIEF REVIEW OF RELEVANT STUDIES

Several studies in the United States and elsewhere illustrate the importance of ideological orientation or posture in the decision to vaccinate. Fortunato and Lombini (2023) observe that there has been as important ideological disparity in vaccination rates between Republicans and Democrats (Fortunato and Lombini 2023). They demonstrated that vaccination rates during the first and second cycles of the American US vaccine campaign (in the first eight months of 2021) were lower, on average, in counties where residents predominantly voted for the Republican Party in the 2020 presidential election. Other studies have made similar observations. Jiang and associates (2022) analyzed survey data from two battleground states in the 2020 election (N = 1,849) which demonstrated that conservatives were less likely to intend to get vaccinated against COVID-19. They noted however that this association was significantly mediated by perceived effectiveness and perceived side effects of vaccination, as well as perceived severity of COVID-19. Wollebæk and associates (2022) revealed an important correlation in Norway between votes for populist parties and the belief that vaccines were not important or effective. They found that "refusal to vaccinate is associated with right-wing ideological constraint, even when considering a wide array of control variables (e.g., lack of confidence, complacency), and sociodemographic characteristics. These studies suggest that vaccine refusal is associated with established political cleavages.

Next, we offer our comparative analysis of the patterns of ideological orientations and how vaccine uptake is associated these patterns between the United States and Canada.

IDEOLOGICAL ORIENTATION AND IDENTITIES IN THE UNITED STATES AND CANADA

Ideological orientation is captured in the response to our survey question – "How would you place yourself on the political spectrum?" Table 1 reveals that when asked about their ideological orientation, Americans tend to situate themselves on the right or to the right of centre (combined 29.5%) to a far greater degree than do Canadians (19.7%). That said, Canadians are far more likely not to identify themselves across the spectrum with a combined 32.1% saying they don't know or prefer not to respond compared with 20.9% of Americans.

TABLE 1. IDEOLOGICAL ORIENTATION: UNITED STATES V. CANADA

Ideological Orientation	United States (%)	Canada (%)
Right	16.8	9.3
Right of Center	12.7	10.4
Center	29.9	25.8
Left of Center	8.3	11.4
Left	11.4	10.9
I don't know	15.4	23.2
I prefer not to answer	5.5	9.1
Total	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

Table 2 shows ideological orientation by immigrant/nativity status in the two countries under study. As shown, those persons born outside the United States are somewhat less likely than those born in the country to identify as right or right of center on the ideological spectrum while there is relatively little difference in Canada in that regard. About one in five American immigrants and non-immigrants cumulatively say that they don't know or prefer not to answer regarding their ideological orientation. Amongst Canadians there are about one in three immigrants and non-immigrants who say that they don't know/prefer not to answer when asked to situate their ideology.

Regard ethno-racial status, Table 3 reveals noteworthy differences across the groups[1] examined here in the extent to which they respectively identify themselves as to the right or right of the centre, with the exception of persons self-identified as Asian in the United States and Chinese in Canada. In the United States, 35.2% of White identifiers situate themselves to the right or right of centre of the spectrum relative to Canadians self-identified as White with 21.1% situating to

1 In the United States, racialized groups included here are: indigenous persons (AI/AN/NH — American Indian, Alaska native, or native Hawaiian), Black or African American, and Asian. In Canada, visible minorities included here are: indigenous, Black, and Chinese.

TABLE 2. IDEOLOGICAL ORIENTATION BY IMMIGRANT/NATIVITY STATUS: UNITED STATES V. CANADA

Ideological Orientation	United States		Canada	
	Born outside the US (%)	Born in the US (%)	Born outside Canada (%)	Born in Canada (%)
Right	11.5	18.2	6.9	5.5
Right of Center	14.6	12.1	11.5	12.4
Center	33.8	29.1	27.3	25.1
Left of Center	9.7	8.0	11.5	15.3
Left	9.7	12.0	9.8	9.2
I don't know	13.7	15.9	24.5	24.3
I prefer not to answer	7.1	4.7	8.6	8.3
Total	100.0	100.0	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

TABLE 3. IDEOLOGICAL ORIENTATION BY ETHNO-RACIAL STATUS: UNITED STATES V. CANADA

Ideological Orientation	US White (%)	Canada White (%)	US AI/AN/NH (%)	Canada Indigenous (%)	US Black (%)	Canada Black (%)	US Asian (%)	Canada Chinese (%)
Right	21.4	7.5	13.7	5.7	15.3	7.2	7.6	5.8
Right of Center	13.8	13.6	9.6	9.9	11.9	7.8	14.7	13.6
Center	28.1	26.0	31.1	24.0	29.6	25.1	38.4	33.5
Left of Center	8.1	15.4	7.1	12.2	10.1	8.4	10.5	11.2
Left	12.2	8.6	9.6	10.8	11.6	9.3	9.5	9.5
I don't know	12.8	21.0	22.3	27.6	15.3	32.8	12.6	21.1
I prefer not to answer	3.6	7.8	6.7	9.9	6.1	9.6	6.6	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

the right. A much higher percentage of White Canadians say they don't know or prefer not to answer (28.8%), compared to White Americans when situating themselves on the ideological spectrum (16.4%). It is interesting to note that amongst each of the groups surveyed in the United States a higher percentage identity cumulatively as right or right of centre than left or left of centre (although the difference is small amongst Asian Americans), whereas in Canada there is a greater tendency for the four ethno-racial groups surveyed to identify more cumulatively as left or left of centre.

IDEOLOGICAL ORIENTATION AND VACCINATION IN THE UNITED STATES AND CANADA

In this section we look at the ideological orientation of persons self-identified with the four ethno-racial groups examined here and the extent to which they report getting Covid-19 vaccines. Table 4 reveals that the overall vaccination rate in the United States is lower than that in Canada. Vaccination is associated with ideological orientation. Particularly in the United States, those persons saying they were least likely to have been vaccinated preferred not to answer or said they didn't know where they stood when asked where they situated themselves along the ideological spectrum. In Canada, those who preferred not to answer as to their ideological orientation were more inclined to have overall rates of vaccination similar to Canadians identifying on the right of the spectrum. It's on that end of the spectrum where the gap in vaccination rates amongst Americans (76.5%) and Canadians (80.7%) is lowest. Similarly, the gap is also relatively low amongst Americans and Canadians respectively identifying with the left on the ideological spectrum. On the other hand, the gaps in vaccination rates are especially wide for Americans and Canadians identifying as right of centre or centre across the ideological

TABLE 4. IDEOLOGICAL ORIENTATION AND VACCINATION: UNITED STATES V. CANADA

Ideological Orientation	Vaccination — "I have had the vaccine for COVID-19"	
	United States (%)	Canada (%)
Right	**76.5**	**80.7**
Right of Center	73.4	92.1
Center	74.5	91.8
Left of Center	83.8	96.5
Left	90.2	95.4
I don't know	60.7	89.4
I prefer not to answer	57.9	82.9
Total	74.2	90.9

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

spectrum as well as amongst those who said they preferred not to reveal their ideological preference.

VACCINATION, IDEOLOGICAL ORIENTATION, AND IDENTITIES

Americans who were born outside of the United States (82.9%) were far more likely to get vaccinated than those born in the country (72.4%). But the gaps in vaccination rates between immigrants and non-immigrants in the United States were not consistent across the ideological spectrum, and hence US-born persons identifying to the right were more likely than the foreign-born to get vaccinated. On the left, the foreign-born were just as likely as the US-born to get vaccinated. Elsewhere across the spectrum those born outside the United were more likely than those born in the country to report they were vaccinated and that is especially the case for those identifying at the center as well as those saying they didn't know or preferred not to answer.

When considering the pattern in Canada, Canadian-born and foreign-born persons did not exhibit much difference in their respective rates of vaccination. As observed in Table 5, the gap in the rates between the Canadian-born and US-born was 17.7 percentage points (72.4% v. 90.1%), which was greater than that (10.4) of the foreign-born in Canada (82.9% v. 93.3%).

Turning to the four selected racialized or visible minority groups in the United States and Canada we track below the respective changes in vaccination rates by ideological orientation over the period October 2021 to October 2022. As shown in Table 6, the gaps across the four groups in the United States were substantially greater. For example, gaps in vaccination rates were wider: American Indian, Alaska native, or native Hawaiian persons were nearly 10 percentage points lower than Black/African Americans, and latter group five points lower than White Americans who were in turn 13 points lower than Asian Americans. In Canada, the gaps in vaccination rates across the four groups were narrower: Indigenous identifiers were five points lower than those self-identified as Black and White, which in turn were five points lower than the rate for Chinese Canadians. In both countries, Blacks showed the largest increase in vaccination rates from 2021 to 2022.

The largest gaps in vaccine uptake in the United States and Canada in 2022 were between native American and indigenous persons (24.3%) and persons self-identified as Black (21.3%), relative to Canadian counterpart groups with the gaps remaining fairly constant across the one-year period. By contrast, looking at vaccination rates between Asian Americans and Chinese Canadians, the difference was far less significant

TABLE 5. VACCINATION, IDEOLOGICAL ORIENTATION, AND IMMIGRANT/NATIVITY STATUS: UNITED STATES V. CANADA

Ideological Orientation	Vaccination – "I have had the vaccine for COVID-19"			
	United States (%)		Canada (%)	
	Born outside USA	Born in USA	Born outside Canada	Born in Canada
Right	72.9	77.1	83.6	79.3
Right of Center	80.1	71.8	94.6	91.3
Center	87.3	70.9	93.1	91.4
Left of Center	88.9	83.1	98.9	95.9
Left	90.0	90.3	97.4	94.6
I don't know	80.5	56.8	93.4	88.1
I prefer not to answer	71.2	55.3	87.0	82.2
Total	**82.9**	**72.4**	**93.3**	**90.1**

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

TABLE 6. CHANGES IN RATES OF VACCINATION BY ETHNO-RACIAL STATUS IN 2021 AND 2022: UNITED STATES V. CANADA

	United States (%)			Canada (%)			Gaps
	2022	2021	Change	2022	2021	Change	2022
Total	74.2	69.0	5.2	91.7	87.1	4.6	17.5
White	76.4	70.4	6.0	91.7	88.6	3.1	15.3
AI/AN/NH / Indigenous	61.5	57.6	3.9	85.8	83.9	1.9	**24.3**
Black	70.6	59.0	11.6	91.9	83.0	8.9	**21.3**
Asian / Chinese	89.3	83.1	6.2	96.7	96.2	0.5	7.4

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2021 and October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

TABLE 7. VACCINATION, IDEOLOGICAL ORIENTATION, ETHNO-RACIAL STATUS: UNITED STATES V. CANADA

	Vaccination – "I have had the vaccine for COVID-19"							
Ideological Orientation	US White (%)	Canada White (%)	US AI/AN/NH (%)	Canada Indigenous (%)	US Black (%)	Canada Black (%)	US Asian (%)	Canada Chinese (%)
Right	62.8	73.3	69.2	66.7	60.0	83.3	87.5	100.0
Right of Center	69.9	90.4	63.6	80.0	77.8	83.3	85.7	94.7
Center	70.8	89.1	64.9	87.5	58.4	82.6	81.4	93.6
Left of Center	78.8	97.1	63.4	95.5	70.0	92.9	87.1	100.0
Left	91.3	94.6	88.6	94.7	78.1	84.6	96.4	90.0
I don't know	58.2	86.1	48.1	78.0	38.3	79.3	70.4	97.9
I prefer not to answer	59.7	80.2	50.0	85.0	50.0	70.0	70.0	85.7
Total	70.4	88.5	64.2	83.5	59.1	82.2	83.1	95.6

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2021 and October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

and actually narrowed between October 2021 (13.1%) and October 2022 (7.4%). Regarding persons self-identified as White in the United States and Canada, the gap was reduced, to 15.3 and 18.2 points respectively, over the one-year period.

When considering the impact of ideological orientation on vaccine uptake across our four groups there is no consistent pattern that emerges in the two countries. Table 7 shows that, amongst indigenous persons in Canada and American Indian, Alaska native, and native Hawaiian persons in the United States, the gaps in vaccination appear considerable at the center of the spectrum (including the right and left of the center) as well as for those saying they don't know or prefer not to answer. For those identifying with the right or left, the gap between Americans and Canadians is much narrower in large part because the indigenous in Canada on the right of the spectrum have especially low rates of vaccination relative to others while American natives identifying with the left have far higher rates of vaccination than does the rest of the spectrum.

In the case of persons self-identified as Black or African American and Black Canadian, only on the right of center and the left is the gap in vaccine uptake relatively narrow. Elsewhere across the spectrum the gap is between 20 and 25 points and above 40 points amongst those saying they don't know where they are situated on the spectrum.

Amongst persons self-identified as White in Canada and the United States there are significant differences in vaccine uptake across the spectrum with the exception of those identifying with the left (3.3%). For those identifying with the right, the gap is about 10 points while elsewhere on the spectrum it tends to be in the 20-point range.

Finally, In the case of Asian Americans and Chinese Canadians the data reveal that in both countries these groups respectively have the highest vaccination rates when compared to the others examined here. There are nonetheless gaps in vaccine uptake with Chinese Canadians more likely than Asian Americans to get vaccinated and the differences

across ranging from between 10 and 15 points with the exception of those saying they don't know where the difference is more than 20 points.

CONCLUSION: CULTURE, CONTEXT, AND POLARIZATION

The above findings offer important insight into the extent to which immigrant status and ethno-racial status influence vaccine uptake, showing that these cultural identification or identities appear to be strong predictors in decisions about vaccination. However, results from our comparative analysis of selected ethno-racial minorities in the United States and Canada call for more nuance when generalizing about the effects cultural influences and/or cultural barriers on whether or not to get vaccinated. In particular, comparing groups that identify similarly in the two countries suggests that socio-political considerations may outweigh cultural factors when, for example, it comes to vaccine hesitation. In other words, ideological of orientation in each country seems to matter than the ethno-racial group with which people identify themselves. Our surveys nonetheless suggest some deviation in the case of the Asian Americans and Chinese Canadians where gaps in rates of vaccination are not as large. It seems that cultural influences may be a more significant predictor for Asians, but it would be premature to conclude about such Asian exceptionalism, as culture is not innate to a group but rather emerges from, or are reshaped by, context and other structural circumstances unique to context. Thus, further examination of the intersection between cultural and sociopolitical factors is needed to validate the above findings. Our results also raise important questions about community cohesion in the two countries and point to the need for more research about in-group polarization along ideological spectrum. Our survey data show that vaccination rates vary across the ideological spectrum by immigrant/nativity status and amongst different ethno-racial groups. Such group dynamics can serve as a microcosm of what we observe for the entire populations in United States and Canada.

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FINANCIAL VULNERABILITY AS A RESULT OF THE COVID-19 PANDEMIC IN CANADA

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INTRODUCTION AND BACKGROUND

There is now ample evidence to suggest that the COVID-19 pandemic has impacted certain groups and communities in Canada more than others. Canadians who were already in precarious economic situations prior to the outbreak faced even more dire circumstances during the pandemic. Indigenous Peoples, visible minorities and newcomers to Canada all tend to be overrepresented among those in vulnerable social and economic conditions (Statistics Canada, 2022).

In terms of financial impacts, the pandemic and consequent economic lockdowns led to disproportionate employment and income losses among lower wage and younger workers (Hou et al., 2020). The initial impacts of the pandemic were similar for both Indigenous and non-Indigenous people—unemployment increased by 6.6 and 6.2 percentage points respectively in the first three months. By the end of 2020, unemployment remained higher among Indigenous people at 12%, compared with 8% among non-Indigenous people (Statistics Canada, 2021).

Visible minorities in Canada also continued to be impacted disproportionately a year into the pandemic. In January 2021, the Labor Force Survey reported an increase in the unemployment rate for Southeast Asians (20.1%, +7.6), Black Canadians (16.4%, +5.5) and Latin Americans (16.6%, +4.5) (Statistics Canada, 2021). In the second half of 2021, labour market conditions – particularly job recovery – strengthened for many Canadians as employment rates rose for Southeast Asian, Black and Filipino Canadians (Statistics Canada, 2022). Although some of the economic hardships dissipated after two years, some latent and longer term impacts were still emerging – a major one being headline consumer inflation[1]

1 The Consumer Price Index (CPI) is a standard measure of the price of a representative basket of goods and services. The headline consumer inflation is measured as the percentage change between the CPI in the current month and the CPI in a base month or the same calendar month of the previous year. Source: The Daily — Consumer Price Index, Statistics Canada, March 2023 (statcan.gc.ca)

which was at a 30-year high at 5.1% in January 2022 (Statistics Canada, 2022).

The current study focuses on determining how different socio-demographic groups in Canada were affected in various financial aspects during the pandemic years. With support from Canadian Institutes of Health Research (CIHR), the Association for Canadian Studies (ACS) and University of Manitoba conducted a cross-national comparison of Canada, United States and Mexico to understand and answer the following research question: To what extent has the COVID-19 pandemic exacerbated socioeconomic inequalities faced by Indigenous Peoples, racialized persons and immigrants?

METHODOLOGY

ACS-Metropolis conducted five large-scale population-based surveys between October 2020 (Wave 1) and October 2022 (Wave 5) with over 40,000 respondents in Canada, United States and Mexico. The surveys were administered by Leger Marketing using a Computer-Assisted Web Interface (CAWI) approach. Various themes were explored in each survey Wave, which were contingent upon time-relevant issues surrounding the pandemic. Some of the major themes focused on financial impacts of the pandemic, fear of catching COVID-19, vaccine uptake and hesitancy, mental and physical health, and trust in institutions.

Since the purpose of this study is to examine the financial impacts of the pandemic on newcomers, Indigenous Peoples and racialized communities in Canada, we focus on the Canadian sample across four Waves of data. To ensure consistency and accuracy of the trend analysis, the final Wave (Wave 5) was omitted from this study due to a change in how the financial impacts questions were formulated. Table 1 shows select demographic information of the Canadian sample for Waves 1 through 4, i.e. the period between November 2020 and March 2022.

DETERMINING FINANCIAL VULNERABILITY

In the financial module of the survey, we asked respondents whether the COVID-19 pandemic has financially affected them when it comes to the following – income or retirement income, losing the job, had to settle for a job with lesser pay, capacity to meet financial obligation, capacity to assist immediate and extended family, meeting basic food requirement, and capacity to send money abroad (remittances). Based on the aforementioned eight questions, we created a Financial Vulnerability Index (FVI) which was normalized to have a minimum value of 0 and a maximum of 100 – the higher the value, the greater the financial vulnerability. To measure how closely related the set of questions are as a group, we performed scale reliability analysis using Cronbach's alpha. The values obtained were 0.8 or higher for each survey Wave which denoted relatively high internal consistency.

RESULTS AND DISCUSSION

Table 2 shows the percentage of respondents impacted by various financial issues over the four survey waves. Respondents' income (or retirement income) was the most affected aspect in each wave, followed by their capacity to meet financial obligations (paying bills, etc.) and assist their families financially. Loss of job was reported by roughly 15 to 18% of the respondents throughout the four waves.

As seen in Figure 1, financial vulnerability among Canadians reached its peak in November 2020 (Wave 1), especially in the western provinces. Respondents from Quebec and the Maritimes reported significantly lower financial vulnerability ($F = 12.2$, $p < 0.05$) compared to the central and western parts of the country. From Wave 1 to 3 (September 2021), there was a gradual decline in financial vulnerability in British Columbia, Alberta, Ontario, and the Maritimes, while the change was minimal in Prairies and Quebec during that period.

In Wave 4 (March 2022), most provinces reported an increase in financial vulnerability compared to Wave 3. The highest increment was observed in the Maritimes where the FVI score jumped from 17 to 26, while the Prairies were an exception where it fell from 30 to 26. Respondents in Quebec reported lower financial vulnerability throughout all survey waves, particularly in the fourth wave where the FVI was significantly lower ($F = 4.1$, $P < 0.05$) compared to other provinces.

Figure 2 shows there was no significant difference (< 1.0) in FVI scores between males and females in all four survey Waves. In terms of education, respondents with a university bachelors degree or higher had a significantly lower FVI score compared to respondents with a high school degree and post-secondary schooling in Wave 1 ($F = 10.3$, $P < 0.05$). Although this trend continued throughout all the waves, the differences between groups were not significant in Waves 2, 3 and 4.

In the first Wave, the younger respondents (18 to 34 years old) experienced greater financial vulnerability (FVI = 34) compared to middle aged (35–54 years old) (FVI = 28–30) and older respondents (55+ years old) (FVI = 16–21). In Wave 2, financial vulnerability was reduced across all age groups compared to the first wave. However, in the third wave, it increased by 5 points for the 35–44 and 55–64 age group and by 10 points for those above 55 years of age. Differences between age groups were significant throughout all waves (F-score ranged between 18 and 34, $P < 0.05$).

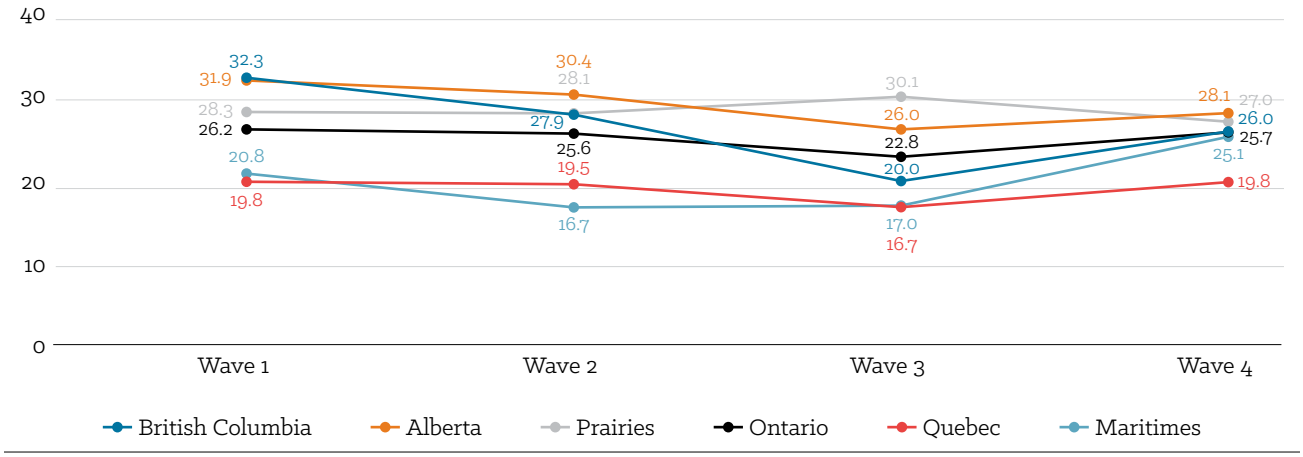
TABLE 1. DEMOGRAPHIC INFORMATION OF SURVEY RESPONDENTS.

Demographics	Wave 1 (Nov 2020)	Wave 2 (Mar 2021)	Wave 3 (Sep 2021)	Wave 4 (Mar 2022)
Total	2759	3070	2980	2939
Ethnicity				
White	73.5%	74.0%	74.0%	74.1%
Indigenous	4.9%	5.0%	5.0%	5.0%
Black	3.5%	3.6%	3.6%	3.6%
Asian	11.8%	11.9%	12.4%	12.0%
Other	6.2%	5.5%	5.0%	5.4%
Immigrant status				
Non-Immigrant	78.1%	78.1%	78.1%	78.1%
Immigrant	21.5%	21.7%	21.6%	21.6%
Sex				
Male	48.2%	48.2%	48.4%	48.3%
Female	51.4%	51.8%	51.6%	51.7%
Age				
18–24	9.9%	10.1%	10.5%	10.7%
25–34	16.9%	17.0%	16.7%	16.6%
35–54	16.1%	16.1%	15.8%	16.0%
45–54	18.7%	18.3%	18.2%	18.3%
55–64	17.1%	17.5%	17.5%	17.3%
65+	21.2%	21.1%	21.2%	21.1%
Education				
High School or less	28.8%	28.9%	28.8%	30.4%
Postsecondary schooling	43.2%	43.2%	42.8%	41.5%
University bachelor or higher	27.2%	27.2%	27.2%	27.2%
Province				
British Columbia	13.6%	13.5%	13.6%	13.5%
Alberta	11.2%	11.2%	11.2%	11.2%
Prairies	6.5%	6.5%	6.5%	6.5%
Ontario	38.4%	38.4%	38.4%	38.4%
Quebec	23.5%	23.5%	23.5%	23.5%
Maritimes	6.9%	6.9%	6.9%	6.9%

TABLE 2. RESPONDENTS AFFECTED IN VARIOUS FINANCIAL ASPECTS DURING THE PANDEMIC.

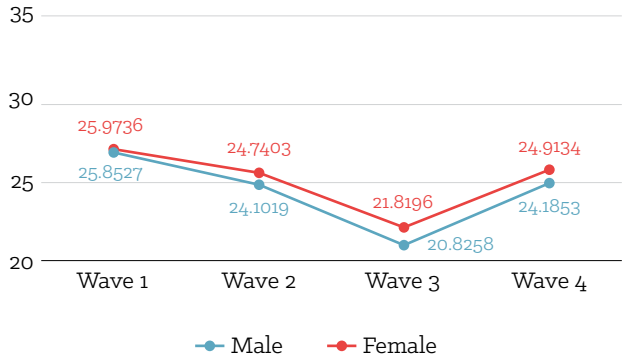
Is the COVID-19 crisis negatively affecting you when it comes to the following? (Yes %)	Wave 1 (Nov 2020)	Wave 2 (Mar 2021)	Wave 3 (Sep 2021)	Wave 4 (Mar 2022)
Your income or retirement income	38.8%	31.8%	31.1%	34.5%
Losing the job you had before the pandemic	17.2%	16.7%	15.4%	18.3%
Had to settle for a new job with lesser pay	12.4%	11.4%	11.7%	13.2%
Your capacity to meet your financial obligations (home/rental, utility payments, etc.)	27.3%	24.4%	24.7%	29.1%
Your capacity to assist your immediate family	32.0%	34.1%	26.4%	29.2%
Your capacity to assist your extended family	32.4%	32.7%	25.5%	27.9%
Meeting basic food requirements	20.2%	19.0%	20.2%	26.7%
Your capacity to send money to family abroad (e.g. remittance)		11.1%	13.6%	15.8%

FIGURE 1. FINANCIAL VULNERABILITY INDEX BY PROVINCE.



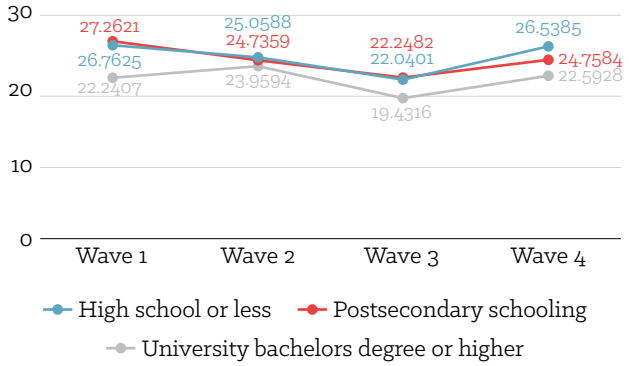
Source: Ravindra Shrestha and Paul Holley, AEC

FIGURE 2. FINANCIAL VULNERABILITY INDEX BY SEX.



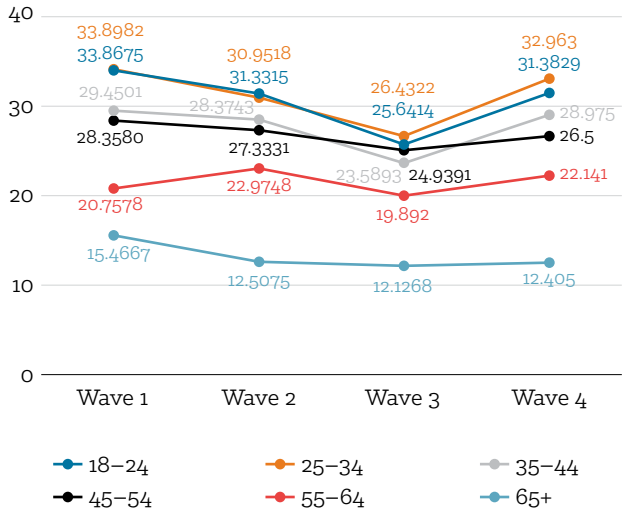
Source: Ravindra Shrestha and Paul Holley, AEC

FIGURE 3. FINANCIAL VULNERABILITY INDEX BY EDUCATION.



Source: Ravindra Shrestha and Paul Holley, AEC

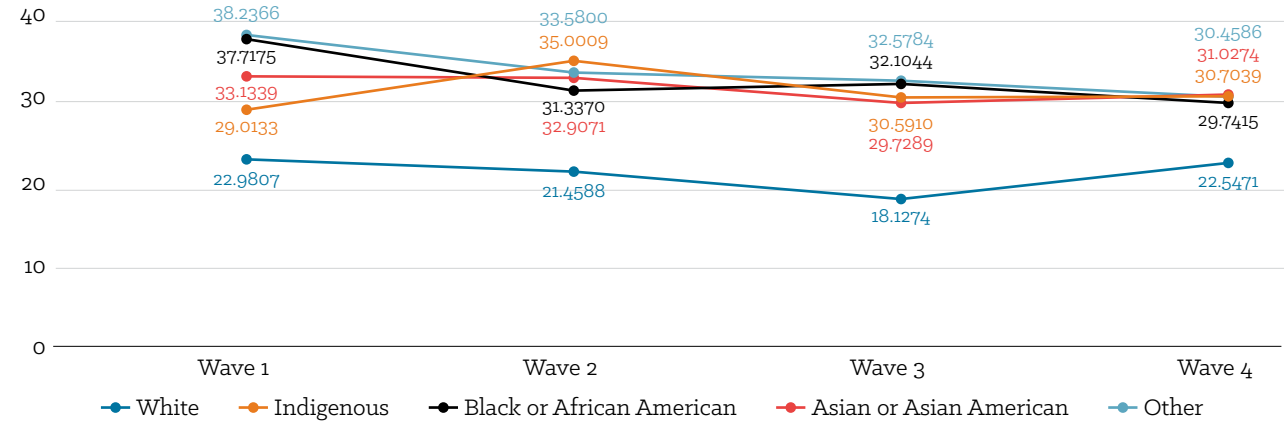
FIGURE 4. FINANCIAL VULNERABILITY INDEX BY AGE.



Source: Ravindra Shrestha and Paul Holley, AEC

Figure 4 shows the trend of financial vulnerability across different ethnicities over the four survey Waves. In all the Waves, respondents from visible minority groups were significantly more financially vulnerable than White respondents (F-score ranged from 9 to 24, $p < 0.05$). In Wave 1, respondents who identified as Black and Other had the highest financial vulnerability score (~38) of all groups, followed by Asians and Indigenous. Financial vulnerability declined for almost all groups in Wave 2 except Indigenous Peoples who saw an increase of 6 points (to 35). The financial vulnerability index dropped by five points for Indigenous respondents in Wave 3, by three points for Asian and White respondents, and by 1 point for Others; there was a slight increase (+1 point) for Black respondents. In Wave 4, White respondents reported a sharp rise in financial vulnerability (by 4 points). For visible minorities there was only a minor change – it increased slightly (~1 point) for Asian and Indigenous respondents and decreased by 2 points for Black and Other respondents.

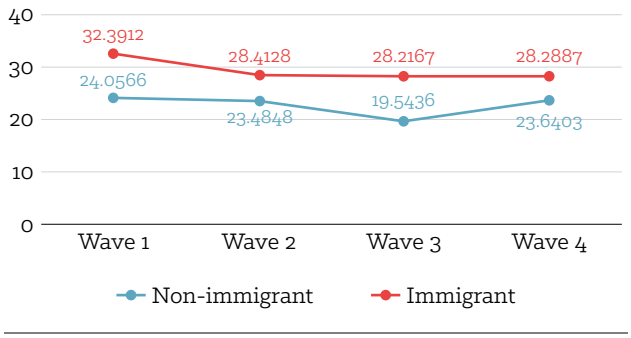
FIGURE 5. FINANCIAL VULNERABILITY INDEX BY ETHNICITY.



Source: Ravindra Shrestha and Paul Holley, AEC

As seen in Figure 5, immigrant respondents were found to have significantly higher financial vulnerability (F-score ranged from 5 to 22, $p < 0.05$) compared to Canadian born respondents in all four Waves. The FVI score (32) was at its highest for immigrants in Wave 1 – it dropped to 28 in Wave 2 and remained more or less unchanged in Waves 3 and 4. Although Canadian born respondents saw a steady decline in FVI through the first three Waves, it jumped back to almost the early pandemic levels in Wave 4.

FIGURE 6. FINANCIAL VULNERABILITY INDEX BY IMMIGRANT STATUS.



Source: Ravindra Shrestha and Paul Holley, AEC

Based on the 18-month survey period between late 2020 and early 2022, the following groups appeared to have the highest financial vulnerability as a result of the COVID-19 pandemic:

- Western Canadians;
- Younger working age group population (18–54);
- Visible minority groups, especially Black, Indigenous and Other;
- Immigrants / Newcomers to Canada.

The overall trend of financial vulnerability from late 2020 to early 2022 in our study seems to indicate that people had started to recover from some of the impacts of the pandemic by mid 2021. It coincides with the time when restrictions were eased and businesses were opening up again. However, the data collected in March 2022 showed a rise in financial vulnerability across many regions and sociodemographic groups. Statistics Canada (The Daily, Labour Force Survey 2022) reported a decline in the employment rate in January 2022 for core-aged members of the general population, including visible minority groups.

One of the key economic issues in early 2022 was the long-term impact of the pandemic on the global supply chain. Many factors such as logistics disruption, production delays, shortage of labour force, and resulting inflation were critical in hampering the economic recovery (Harapko, 2022). The period between survey Wave 3 (September 2021) to Wave 4 (March 2022) also coincides with the peak of the Omicron variant, which could have potentially impacted people's economic situation. In late 2021, the Conference Board of Canada had forecasted a real gross domestic product (GDP) growth of 4.4% in 2022. However, in January 2022, the CBC were forced to change the growth forecast to 3.9% as the effects of surging Omicron cases weighed on Canada's economy (The Conference Board of Canada, 2022).

Previous economic recessions have had long-term negative impacts on labour markets, particularly unemployment rates (OECD, 2020). Even a decade after the 2008 financial crisis, the unemployment rate had still not recovered in half of OECD regions. Looking at the previous five recessions in the United States, the most affected local labour markets experienced employment and wage losses that persisted for at least a decade (OECD, 2020). Based on historical precedents, we cannot gauge the impacts of major economic shock events such as the COVID-19 pandemic completely and accurately within two years. Longer term and in-depth research needs

to be conducted over the next several years to better understand the widespread impacts of the pandemic, notably on the financially vulnerable groups identified in this study.

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APPENDIX – TABLE A. TEST OF SIGNIFICANCE (ANOVA) FOR FINANCIAL VULNERABILITY INDEX.

	Wave 1	Wave 2	Wave 3	Wave 4
FVI by Province				
F statistic	12.2	9.8	9.4	4.1
P value	< 0.05	< 0.05	< 0.05	< 0.05
FVI by Sex				
F statistic	0.3	0.01	0.8	0.4
P value	**0.78**	**0.91**	**0.38**	**0.53**
FVI by Education				
F statistic	10.3	0.9	1.6	2.3
P value	< 0.05	**0.42**	**0.18**	**0.07**
FVI by Age				
F statistic	29.2	33.8	18.1	33.1
P value	< 0.05	< 0.05	< 0.05	< 0.05
FVI by Ethnicity				
F statistic	20.2	24.4	24.7	9.3
P value	< 0.05	< 0.05	< 0.05	< 0.05
FVI by Immigrant status				
F statistic	21.8	7.6	20.9	5.6
P value	< 0.05	< 0.05	< 0.05	< 0.05

HEALTH SYSTEM RESPONSES TO COVID-19 IN MEXICO

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This article assesses the state of the Mexican health system in 2020 and how it responded to COVID. Mexico is a significantly unequal country, and its health system is based on a multi-tier structure. Although it has remained so since the 1940's, it was substantially reformed in 2004 and in 2019. These reforms account for its ability to respond to COVID in 2020 and 2021. In 2020, Mexico's health system had suffered a significant deterioration from its previous configuration, and this compounded the impact of Mexico's pre-existing social inequality.

In 2003, Mexico's health system had three tiers:

- A private system, on which Mexicans spent their own money, mostly through out-of-pocket expenses, but also through private health insurance.
- A social security system, founded by law in 1943, and comprising several different social security institutes. The largest, the Mexican Institute for Social Security (IMSS) [Instituto Mexicano del Seguro Social], was devoted to private sector employees. There are also institutes for the Mexican Petroleum (PEMEX) [Petróleos de México], for public sector employees, the Social Security Institutes for State and Civil Service Workers (ISSSTE) [Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado], for the army, and several state employee institutes. These institutes are funded by bilateral (employer-worker) or trilateral (employer-government-worker) fees. In the late 1970's, this system was charged with bringing health care to some of Mexico's poorest regions.[1]

1 In the late 1970's, the Mexican government decided IMSS was better suited to provide health care services to Mexico's poorest, and it therefore increased funding to IMSS in order to allow it to do so.

- A public "open access" system operated by the federal secretariat of health and state health secretariats (Escobar Latapí, 2022).

Mexico's tax revenue system is centralized. Most revenue is collected by the federal government, although starting in 1998 a system was created to re-distribute federally-collected funds to states and municipalities.[2] In 2003, the private health system received private payments totaling 586 billion pesos, the social security system received 333 billion from dedicated fees from workers, employers and the government, and the "open" system received 290 billion, mostly from the federal government, and the decentralized health fund created in 1998 (IMSS, 2003).

SOCIAL INEQUALITY IN HEALTH CARE PROVISION

Although the "open" system's share of federal funds had been rising in real and relative terms, it contributed to inequality in total health funding per capita, because it took 1998 funding levels per state and retained the shares distributed to states since. "Open" per capita spending ranged 8:1 among states, when considering the population without social security (Escobar Latapí & González de la Rocha, 2022; García-Junco, 2012; Knaul et al., 2003). Attempts to equalize federal funding to states had been barred in Congress by the most favored states.

It could be imagined that the system had a one-to-one social class correspondence, with the top tier serving the well-to-do, stable workers and employees in the social security tier, and the poor in the "open" service. While this is roughly correct, the impact of private health spending was largest (and rising) for the poor, and they were substantially affected by catastrophic health spending. In our research, we witnessed very numerous cases of catastrophic impoverishment of poor households on account of health emergencies or chronic disease.[3] In 1980, Mexico's poor did not access the private system, except for minor illnesses and maternity care. In 2003–2008, several studies pointed at the frequent use of private health care among Mexico's poor. Underfunding of the "open" system also meant it wasn't free. Patients and their families had to pay for various services and medical supplies (Escobar Latapí & González de la Rocha, 2022).

While the spread of private health providers to lower-class areas and communities played a role in this increasing expenditure, an additional factor was that private pharmacies added a doctor's office in the early 2000's. This served to stop the sale of antibiotics and other restricted drugs over-the-counter, but it also led to relatively large expenses by the poor. Private health consultations soared. Today, private pharmacy consultations are the largest single form of health provision in Mexico.

THE 2004 REFORM: THE SEGURO POPULAR

In 2004, Mexico's constitution and its General Health Law were substantially modified to accommodate a new form of health care provision for the uninsured. The main care providers in the Mexican health system were the state health secretariats, although a number of federally-managed high-specialty institutes comprised the pinnacle of attention. In all, over 200 articles were added to the general health law. These reforms built a very complex system for the financing and provision of health services in Mexico's public health system. The Seguro Popular strengthened the "open" provision of health care by the government, although it did provide payments for care to private clinics, where public clinics were not equipped to do so.

The reform contemplated a fixed per-capita amount to be provided to states for each uninsured person. This amount was to be matched by state governments. Mexico's unequal "open" funding was supplemented but could not be eliminated.

An entirely new budget line was designed for Mexico's "Popular Health Insurance". The government signed agreements with states, on the basis of which significant infrastructure and services were added. Of the total funding, the federation allocated 8% to so-called "catastrophic illnesses", to be disbursed after individual diagnosis of rare and expensive health events. The rest was distributed to states according to their uninsured population. This meant Mexico's public health funding became progressive for the first time, although in all it wasn't, because the old unequal health fund persisted. Clinics were supposed to receive new funding, and so patient payments for services and materials were banned. Also because of the new funding, clinics had to be certified in order to be funded by the new system. According to top officials in the new system, the novelty lay in the financing mechanism for improved health care. They downplayed the need for accountability once the federal funds were disbursed to newly appointed agencies in each state.

2 This system was created when Mexico's government party lost control of congress (1998). This system is called "Branch 33" in the annual federal budget, and accounted for 34% of all federally-collected expenditure. Branch 33 comprises eight different funds. The health service fund is called FASSA.

3 Health emergencies lead to unusual expenses, debt, and asset loss. Chronic disease leads to the loss of one or two workers per household, including the caregiver, and constant expenses that also impoverish households.

By 2012, 52 million Mexicans had been enrolled in the Seguro Popular. This did not mean 52 million had access. Our analysis for 2012[4] (Escobar Latapí & González de la Rocha, 2022) showed haphazard health care trajectories, due to many refusals at public health institutions; rejections due to overcrowding or understaffing in Oaxaca (pregnant women mostly); some state governments led large affiliation campaigns, to capture federal, funds, and then refused access to those enrolled, directing them to federal health services such as IMSS-Oportunidades.

Concerning clinic certification, we found approximately half of the clinics in our fieldwork had been appropriately screened in 2010 – 2012, to guarantee their ability to provide the standard of care defined by Seguro Popular. The other half, however, had been rushed through the process, and did not meet the standard.

Nevertheless, most users finally received attention and made substantial savings. This included rare illnesses such as drepanocitosis, a growing number of types of cancer, and other less frequent illnesses. In spite of the state governments' reluctance to match federal funds,[5] in most states staffing, infrastructure and services improved. By 2018, service had improved considerably. Chronic disease prescriptions, which had been half-filled in 2012, also improved. External evaluations concluded that members' catastrophic expenses fell by 38%.

The progressive or regressive character of the reform was debated. Nevertheless, it was clear that indigenous peoples and the poor were the ones reporting membership most frequently, and that they were the most numerous users of the new system. Lack of access to health services dropped from 38.4 to 16.2% among the Mexican population in genmeral, according to self-reporting, from 2008 to 2018. This change, together with rising rural incomes and rural social security affiliations, accounted for most of the fall in Mexico's poverty rate during this period (Coneval, 2018).

THE 2019 REFORM

Mexicans elected a new president in 2018. López Obrador was seen as a polar opposite to the corruption that characterized the Peña presidency. Nevertheless, it soon became apparent corruption was not the target of the new presidency. Instead, something close to an institutional tabula rasa was sought.

Seguro Popular was defunded almost as soon as López Obrador took office. Its budget, however, was not transferred to other mechanisms to provide health services. Instead, the savings derived from this and other social services such as education, or water provision, were devoted to the President's favorite public works (an airport at a site deemed inadequate by IATA, a cargo – touristic train in the Maya peninsula, a refinery built at sea level that has since flooded on numerous occasions)[6] and to a much enlarged military, which added an entirely new corps, the Guardia Nacional.

An example of the cuts in health funds lies in the medical expenses devoted to childhood cancers. Expenditure stood at 300 MX pesos when López Obrador took office. It dropped to 15 million in 2021 (Campos & Cano, 2023). The cut is equivalent to 95%.

By May 2019, a new reform of the Health Law was passed. The new reform was very straightforward. It created the INSABI, or National Institute for Well-Being in Health. At its core, the federal government vowed to guarantee the right to health and universal health access. The government became the guarantor. As part of the health law, a number of cash and in-kind transfer programs were included. This gave the impression health spending was not lower, but in fact it was (Reyes-Morales et al., 2019). Other than naming the federal government as ultimately responsible for health care, it did not state specific mechanisms for the financing of hospitals, clinics, and other establishments. It relied on convincing state governments to turn over their infrastructure and staff to the federal government. About one-quarter of the state governments refused. Expense on prescription drugs fell significantly too.

On the other hand, the director of Mexico's Social Security Institute resigned within six months of taking office. When he left, he stated he did so because the institute was perceived as a tax collector, rather than a service provider (IMSS, 2019). The person taking his place was more compliant.

To sum up: Mexico's public health sector, but particularly the services aimed at the poor, improved significantly, albeit with significant deficiencies, from 2004 to 2018. After that, they were defunded. The entire system was in crisis. Pharmacy

4 Our study comprised an effort to account for the self-reported quality of care. We carried out a survey of 600 households in 12 communities in four states, and then we chose health incidents to trace individuals' health care trajectories.

5 States such as Oaxaca depend on the federal government for 98% of their revenue. There was no possibility for them to match federal funds aimed at health care. Rather than re-working the federal-state shares, which would have provoked complaints from richer states, the federal government decided to maintain the fiction that state governments, regardless of their revenues, would provide the staff and the operational funds for new clinics and hospitals.

6 And, one year after its inauguration, has yet to refine its first bushel of oil.

doctors, and pharmacy consultations, became the single most important means to access medical care in Mexico, with the poor as their main clients. Because these doctors' prescriptions are not supervised, they overprescribe, which leads to higher expenses and, possibly, to inferior health outcomes.

SYSTEM RESPONSES TO COVID

Is this reflected in the system's responses to COVID? This article argues it is. The lack of funding was compounded by very conflicting signals from Mexico's leaders, i.e., mainly the president, his federal health secretary, and the deputy secretary of health. The government's response included the following: In March, the president and the deputy secretary of health stated COVID was "like a flu", and Mexicans needed to keep hugging (Gobierno de México, 2020a, 2020b). Shortly after, they prescribed social distancing (Gobierno de México, 2020d). In March 18th, the president stated on national TV that he was protected by holy images he carried in his pocket (Gobierno de México, 2020c). Both officials repeated, until June, that there was no proof masks helped reduce infection. International tourism was never restricted, and infections along Mexico's border and in its main tourist destinations were not disaggregated. We later learned that unemployment, hospital saturation, and lack of care led to extremely high infection and death rates in these towns.

In April, the economy was locked down except for essential services, which led to a significant peak in unemployment and underemployment. Employers were told to keep all of their workers in employment, at least on a minimum salary, but there were no special policies for income replacement. In May, 2020, the deputy Secretary of health announced "we have flattened the wave". Resident doctors in Mexican hospitals were blamed for poor care, and had to buy their own PPE, but they were extremely scarce. Over 1,200 doctors died (Institute for Global Health Sciences, UCSF, 2021).

Whether a system's response is good or bad can be assessed by various means. In this case, we turn to a North American comparison of the incidence of COVID. Since Mexico, the U.S. and Canada employed diverse reporting systems, the following analysis draws on the ACS-Metropolis survey of COVID that consisted of five waves and was implemented simultaneously in all three, between 2020 and 2022. The survey asked the same questions, translated, in each country. While it cannot be guaranteed that the questions had the same meaning in each cultural matrix, this is the best source for a comparison of the major events and trends related to COVID in North America.[7]

According to official sources, Mexico had the lowest incidence of COVID in North America. According to the survey, however, Mexico's infection rate was the highest of all three. Note the rapid rise in self-report incidence from March to August, 2022. The most comparable figures are those for August 2022. In sum, Mexico's rates were the highest, and at 1:10, the gap between official data and self-reporting was also much higher than in the other two countries.

Was this higher incidence of COVID related to the social equality or inequality of infection? Figure One shows the rates of infection per income class, according to the ACS-Metropolis survey.

Figure One shows infections were "progressive" (they increase as income increases) in Canada and the U.S., while in Mexico the income classes with the highest incidence are classes 2, 3

TABLE 1. FREQUENCY OF SELF-REPORTED COVID: CANADA, UNITED STATES, MEXICO (%).

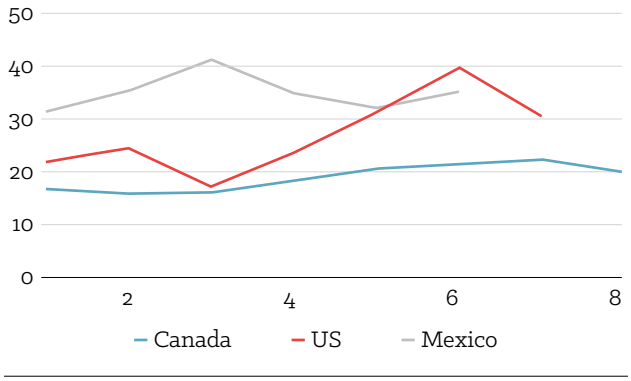
	Official sources (August 2022)	ACS – Metropolis, self-report (March 2022)	ACS – Metropolis, self-report (August 2022)
Canada	11.1	17.8	39.4
United States	28.4	25.3	37.9
Mexico	5.4	35.6	49.8

Sources: ACS-Metropolis survey, Waves 4 and 5, CDC (2020), Johns Hopkins University(2020/2023)[8], Mexican Secretariat of Health (2020).

7 It was up to the respondent to consider whether or not (s)he had suffered COVID. The interviewer did not ask for proof. It could be said that environments with better access to testing would show higher incidences. In this case, however, Mexico had the highest incidence, and this would seem to reinforce the difference among all three.

8 On March 10, 2023 the Coronavirus Resource Center stopped collecting data after three years of 24-7 operations. The information that was collected during this time can be found at: https://github.com/CSSEGISandData/COVID-19

FIGURE 1. SELF-REPORTED INFECTIONS BY INCOME CLASS FOURTH WAVE, MARCH 2022 (%).



Source: ACS-Metropolis survey on COVID, 4th wave (2022).

and 4, roughly equivalent to urban lower income classes. They received treatment either from Mexico's "open" health care system, or from private pharmacies. In other words, lower classes were better protected in the U.S. and Canada than in Mexico. Note that Mexico's lowest income class was less subject to infection. It is comprised of mostly rural inhabitants. Also note that the number of income classes varies between countries.

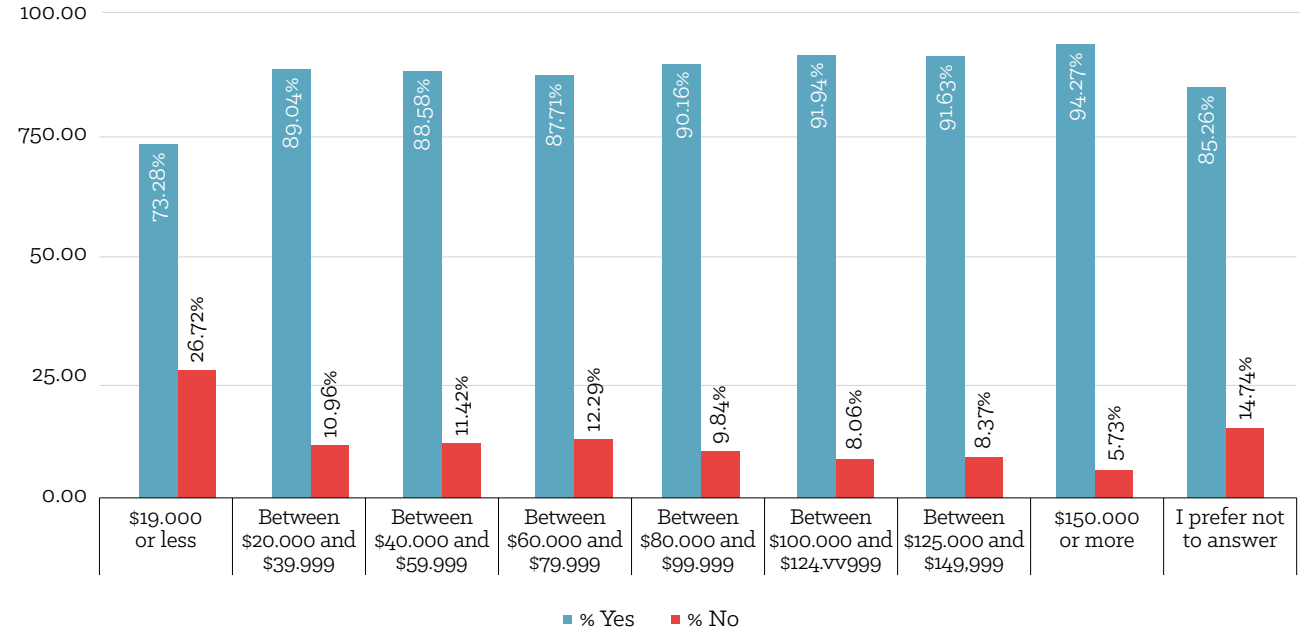
The "progressive" nature of infection in the U.S. and Canada may be related to the ability of the better-off to spend time and money being tested, which leads to more positives, to less risk-aversion among the higher income classes, or to other causes. In any case, there is a contrast in the class dynamics of self-reported infections. It may also be due to the proclivity of the various income classes to find, or to accept, vaccination.

It could be hypothesized that Mexico's higher incidence of COVID among lower-income classes was related to lower total vaccination rates, or to lower vaccination rates among its lower-income classes. This is not the case. Self-reported vaccination rates (which are less subject to error than COVID vaccination rates) are higher in Mexico than in the U.S.

The ACS-Metropolis survey outcomes show that vaccination rates were higher in Mexico since March 2022 than in the US, and comparable or higher in Mexico than in Canada (the Mexican sample is smaller, and error margins are higher, especially when disaggregated). By social class, vaccination rates were most unequal in the U.S. (however social classes are defined), with the lowest income classes showing vaccination rates below 60% and the highest close to 90%. Canada comes second in terms of vaccination inequality, with the lowest income class barely above 70% and the highest income class at 94%. Mexico displays the highest and most equitable distribution, with all social classes above 90%. In other words, the social distribution of vaccinations does not explain Mexico's far worse health outcomes, nor its socially regressive infection rates. In Mexico. persons 65 years old and over were prioritized, which allowed the operatives to go forward before massive amounts of vaccines became available.

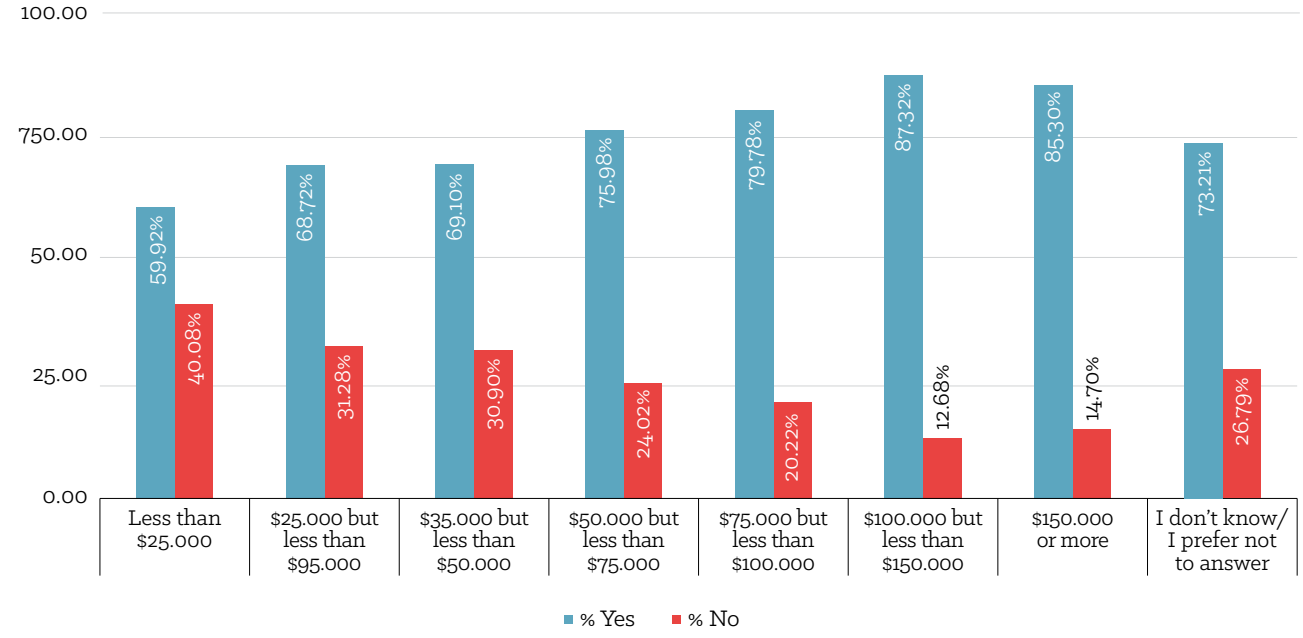
The timing and structure of Mexico's campaign may, however, be very relevant. In Mexico, the government decided to

FIGURE 2. VACCINATION RATES BY INCOME CLASSES, CANADA.



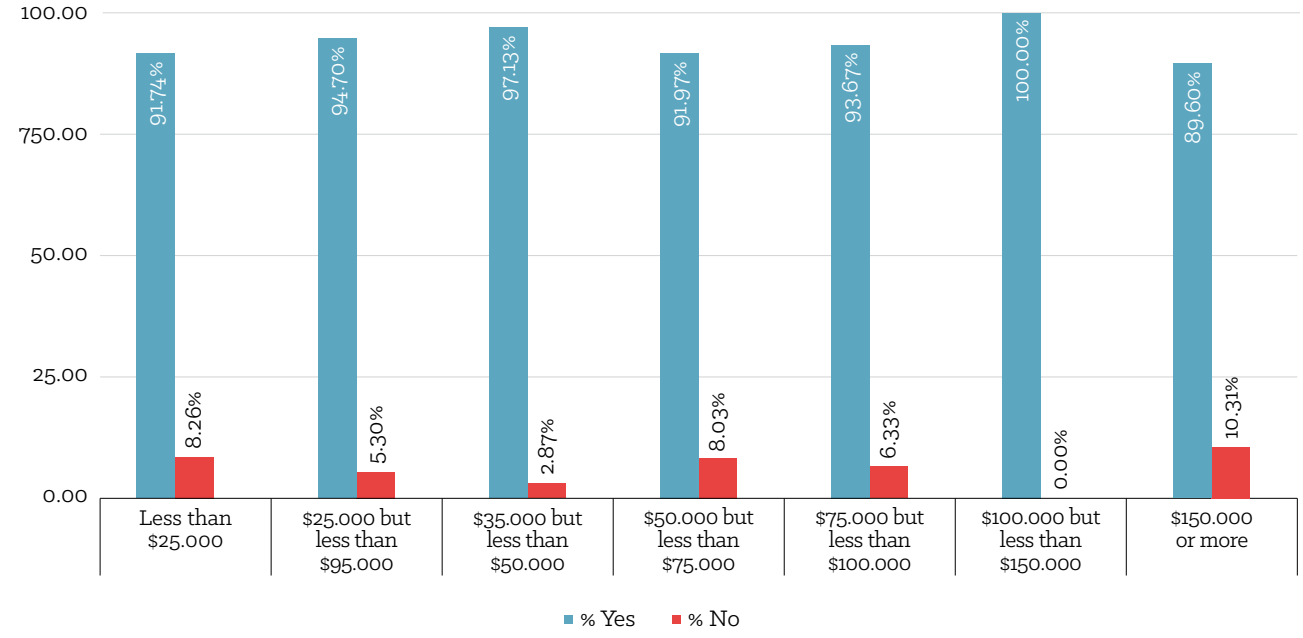
Source: ACS-Metropolis survey on COVID, 4th wave (2022).

FIGURE 3. VACCINATION RATES BY INCOME CLASSES, UNITED STATES.



Source: ACS-Metropolis survey on COVID, 4th wave (2022).

FIGURE 4. VACCINATION RATES BY INCOME CLASSES, MEXICO.



Source: ACS-Metropolis survey on COVID, 4th wave (2022).

only allow public health providers and the army to organize mass vaccinations. It decided to forego its health secretariat vaccination apparatus (one that had earned international awards for its large coverage of basic vaccines), and instead recruited the army and secretariat of well-being staff to deploy the operatives. Note that the secretariat of health's vaccination apparatus had been seriously de-funded by 2020. Private practitioners had no access to vaccines. Vaccination started in Mexico's most socially marginalized communities, typically rural, distant and poorly connected. It then progressed towards medium-sized towns and cities, and finally arrived in metropolitan centers once vaccination supplies had

increased (Institute for Global Health Sciences, UCSF, 2021). It is reasonable to assume this strategy benefitted the rural poor and the elderly the most, and that the urban poor of working age in metropolitan areas were among the most disadvantaged. While this strategy seems socially progressive, lower income classes in metropolitan Mexico were among the last to benefit. This, together with the absence of income-replacement programs, forced them to continue to work and they suffered high rates of infection.

CLOSING REMARKS

This article intends to show that Mexico's high rates of infections was due to the disarray (and budget cuts) associated with Mexico's 2019 reform of the health system.

While there may have been few national success stories from the point of view of allowing a population to arrive safely, from a health and an economic point of view, to a full vaccination scheme, the Mexican strategy had to face the pandemic with a much diminished secretariat of health, which never overcame the restructuring arising from the end of the Seguro Popular and the instatement of INSABI. The above analysis showed that lower income classes in urban Mexico were the worst-hit by infection, and that their rates of infection were higher than in the U.S. or Canada. This article did not analyze rates of lethality, which were also much higher in Mexico than in the other two countries, at 9% during the first two years of the pandemic. In other words, hospitals were particularly ill-equipped to treat the ill.

In April, 2023, the official party's majority in Congress voted to abolish INSABI, and passed all of its assets and responsibilities to IMSS, the social security institute. Whatever the structure of the latest reform of the health system, however, if the funding isn't there, it is unlikely to be able to respond to a new health emergency.

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PUBLIC OPINION ON IMMIGRATION IN NORTH AMERICA DURING THE GLOBAL PANDEMIC: HOW DID THE PANDEMIC AFFECT VIEWS AROUND IMMIGRATION LEVELS AND NEWCOMERS IN CANADA AND THE UNITED STATES?

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INTRODUCTION

Following several decades of declining birth rates, newcomers are the essential demographic remedy for a country that seeks to increase its national population. In Canada, immigration is the principal driver of population growth. Critics of immigration often dispute the observation about the demographic importance of newcomers. But the global pandemic provided evidence of the actual impact of international immigration on population change with the considerable reduction in the numbers of immigrants in 2020 compared with the previous year. In effect, results from the 2021 census confirmed that as a result of the pandemic population growth slowed from a record high in 2019 (up 583,000 or +1.6%) to its lowest growth rate in a century in 2020 (up 160,000 or +0.4%). Nonetheless, the rate of Canada's population growth remained the highest amongst G7 countries (Statistics Canada, 2022).

That which follows will consider the impact of the global pandemic on immigration levels in Canada over the first two years of the pandemic (2020–2022) and offer a comparison with the United States. Much of the focus will be on the evolution of opinion about immigration in the two countries and the extent to which the pandemic potentially influenced the views of Canadians and Americans about newcomers. It is contended that Canadian policy-makers mostly sought to orient public opinion on immigration rather than taking direction from it. In addition, some insights will be offered around the admission of Afghan refugees in Canada and the United States.

IMMIGRATION AND DEMOGRAPHY IN CANADA AND THE UNITED STATES

In 2020, deaths in Canada surpassed 300,000 (309,893) for the first time in Canadian history. The Public Health Agency of Canada (PHAC) reported that 15,651 or 5.1% of deaths in 2020 were caused by COVID-19, meaning that the pandemic is estimated to have been the cause of about 1 in 20 deaths in Canada. This proportion was lower than what was estimated in the United Kingdom (12.3%), the United States (11.2%) and France (9.7%) but higher than in Australia (0.7%) and New Zealand (0.1%).

In 2020 the number of deaths remained lower than the number of births but natural increase (births minus deaths) fell to its lowest annual level since at least 1922. By far however, the most significant demographic impact of the pandemic came from changes to international migration which since 2016 accounted for more than three-quarters of the total population growth since 2016, reaching 85.7% in 2019 (Statistics Canada, 2022).

As observed in the table below, Canada welcomed 184,624 immigrants in 2020, down by almost half from 2019 (a decline of 46%) and the lowest in any year since 1998. The pre-pandemic target for immigration set by Immigration, Refugees, and Citizenship Canada was 341,000. But the numbers admitted to Canada in the following year, 2021, returned to new record levels exceeding 400 000 and for 2022 admitted 437 500 permanent residents.

For its part, the United States saw a reduction in the numbers of immigration admitted annually over the period 2020 and 2021 by some 30 percent relative to 2019. In 2022, the United States appears to be on track to return to the annual level admitted prior to the emergence of the pandemic. (See Table 1).

It is worth noting in the table above that Canada's immigration rate stands at around 1.1 per cent of its total population

TABLE 1. ANNUAL NUMBER OF PERMANENT RESIDENTS IN CANADA AND ANNUAL NUMBER OF LEGAL IMMIGRANTS IN THE UNITED STATES, 2010–2022.

Annual Immigration	United States	Canada
2010	1 042 625	280 686
2011	1 062 040	248 701
2012	1 031 631	257 763
2013	990 553	259 034
2014	1 016 518	260 283
2015	1 051 031	271 808
2016	1 183 505	296 385
2017	1 127 167	286 485
2018	1 096 611	321 045
2019	1031 765	341 175
2020	707 362	184 385
2021	738 199	405 330
2022	730 995 (January to September)	437 500

Source: IRCC, "Permanent Residents, Monthly Updates" and Homeland Security, Legal Immigration, Fiscal Years and Adjustment of Status, 2010–2022.

though it dipped to 0.5% in 2020. Canada generally welcomes three times more immigrants on a per capita basis than the United States and that gap rose substantially in 2021-the second year of the pandemic.

Travel and border restrictions in 2020 impacted the movement of Canadians leaving and returning to the country (and changing their usual place of residence minus net emigration). The decrease in the number of non-permanent residents caused by COVID-19 also played a major role in the slower growth in 2020 as more non-permanent residents left Canada than came to the country in 2020. This represented the (-86,535)—the largest net loss since comparable data was available. By comparison, Canada had a net gain of 190,952 non-permanent residents in 2019.

In the case of the United States the year 2021 will go down as the year with the slowest population growth to date in that country's history which fell to an unprecedented 0.1 percent. According to the United States census bureau, gains from immigration and natural increase fell sharply in recent years. Yet despite what was described as rather sluggish results a new pattern is emerging wherein Immigrants, (even at the reduced levels seen in Table 1) for the first time, constitute the source of the majority of the country's population growth (in part attributable to declining rates of natural increase in the US). Not only is the overall percentage of Americans born in other countries on the rise, but the share is approaching levels not seen since the late 19th century (Jordan and Gebeloff, February 2022).

Much like in Canada, in the United States in 2020 measures taken in response to the COVID-19 pandemic contributed to the slowdown in immigration with tougher immigration policies. This was highlighted by United States border closures with Mexico and Canada and limited international entries to the country air. While pandemic related reductions in immigration numbers continued in the United States through much of 2021, in Canada there was a significant resurgence in immigrant admissions in that same year. Thus, notwithstanding the persistence of the pandemic, in 2021 Canada welcomed the highest annual number of immigrants in its history. As viewed in Table 1, the number of newcomers admitted to Canada was more than double what it was in 2020 as overall population growth returned to pre-pandemic levels.

Indeed, the immigration department (Immigration, Refugees and Citizenship Canada) surpassed its projected newcomer admission level for 2021 which forecasted 401 000 new permanent residents. And, the federal immigration plan called for continued increases for subsequent years and aimed at making up for the 'shortfall' in 2020 which the Immigration Minister deemed essential to keep Canada's economy buoyant (El-Assal and Thevenot, 2022).

Still, the 2021 census of Canada revealed that "more than 8.3 million people, or almost one-quarter (23.0%) of the population, were, or had ever been, a landed immigrant or permanent resident in Canada. This was the largest proportion since Confederation, topping the previous 1921 record of 22.3%, and the highest among the G7"[1].

1 www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026a-eng.htm

CANADA, THE UNITED STATES: COVID-19 AND IMMIGRATION LEVELS

Saunders (2021) observes that while immigration to Canada was affected by the decrease in flights and the closure of the U.S. border to most traffic, there was flexibility for applicants that had already been approved for those entry to Canada as well as for those in the country whose documents expire before they are able to travel. For its part, the United States took a more categorical approach to immigration by suspending the entry of economic-based immigrants for sixty days (with some exceptions) because of the "impact of foreign workers on the United States labor market, particularly in an environment of high domestic unemployment and depressed demand for labor" (Saunders, 2021).

In January 2020, the Trump administration issued a series of immigration-related measures that it deemed necessary to stop the spread of COVID-19 including travel bans, a suspension of routine visa services, and a suspension of refugee resettlement. While the Trump administration introduced measures that cast immigrants as a burden, surveys of American opinion also revealed that many viewed immigrants as essential workers on the front lines in the fight against the pandemic at hospitals, grocery stores, pharmacies, retail stores, and delivery services.

Surveys conducted on immigration levels by the firm Gallup reveal that in the latter part of the 20th century most Americans preferred decreases in levels of immigration. Such sentiment declined sharply since 2010 and during the pandemic a July 2020 Gallup poll revealed that for the first time since the firm began asking the question in 1965, the percentage of Americans who said they wanted to see an increase in immigration (34%) was greater than the percentage who wanted immigration to the U.S. cut (28%). Some 36% wanted the level of immigration unchanged (Younis, 2020).

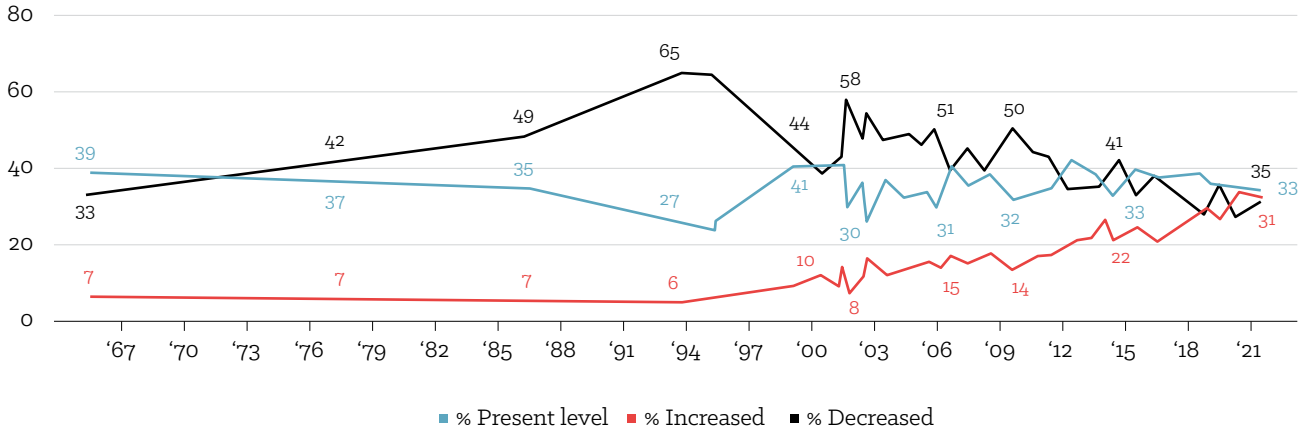
Other surveys come to similar conclusions. A September 2020 Pew Research poll found that, since 2016, the public has moved in a positive direction when considering the impact of the growing numbers of newcomers from other countries in the U.S. Sixty percent said that newcomers strengthen American society. At the time of the election of the Trump administration, in 2016, only 46% shared that opinion. During the Trump years there were year to year declines in the number of immigrants admitted to the United States. Perhaps paradoxically however, despite the anti-immigration discourse that characterized much of the Trump administration, the Gallup survey below reveals that negative public sentiment towards immigrants actually declined over the period 2016–2020. (See Survey 1).

Pew Research surveys point to important differences in opinion around immigration in the United States on the basis of partisan preferences. Hence, they observe that in September 2020 the desire for more immigration was driven by Democrats (50% of whom want increases compared with 22% in 2010) There was also stark difference between Biden and Trump voters when asked in 2020 whether newcomers strengthen America with 84% of Biden voters in agreement compared with 32% of Trump voters. However, both groups of voters moved 13% in a positive direction since 2016, from 71 to 84% for Biden voters, and from 19 to 32% for Trump voters (Pew Research, 2020).

CANADA, COVID-19 AND IMMIGRATION LEVELS

Over much of the period prior to the onset of the pandemic a majority of Canadians felt that the annual numbers of immigrants coming to Canada was about right. As seen in the Chart below, with only a few exceptions did the percentage saying there were too many not noticeably exceed those saying that there were too few immigrants. Coinciding with the increases in the numbers of Syrian refugees coming to Canada, in

SURVEY 1. IN YOUR VIEW, SHOULD IMMIGRATION BE KEPT AT ITS PRESENT LEVEL, INCREASED OR DECREASED.



the year 2016, the percentage contending that the number admitted was just about right reached a height for the period covered in the survey (1996–2019). (See Survey 2).

Examining the 26 polls commissioned by IRCC over the period 1996–2019 (as illustrated above), reveals that on average some 55% of survey respondents felt that the number of immigrants admitted to Canada was just right/about right, that some 31% felt that there were too many immigrants, that 12% felt that there were too few and 7% said that they didn't know or preferred not to answer. But the graph above shows that there was a marked shift in favorable views around levels of immigration commencing about the year 2004 and continuing over the subsequent 17 surveys. Based on surveys conducted over the period 2004–2019, those Canadians contending that there were too many immigrants averaged 26.5%. Not only did the pre-pandemic period in Canada feature relatively good support for immigration levels but compared with other immigrant receiving countries, Canadians were most likely to regard immigrants as strengthening the country rather than being a burden. Indeed, when compared with the United States a 2018 Pew Research Center Survey found that 68% agreed that immigrants strengthen the country whereas that view was held by 59% of Americans (Gonzalez-Barrera and Connor 2019). (See Pew Research table).

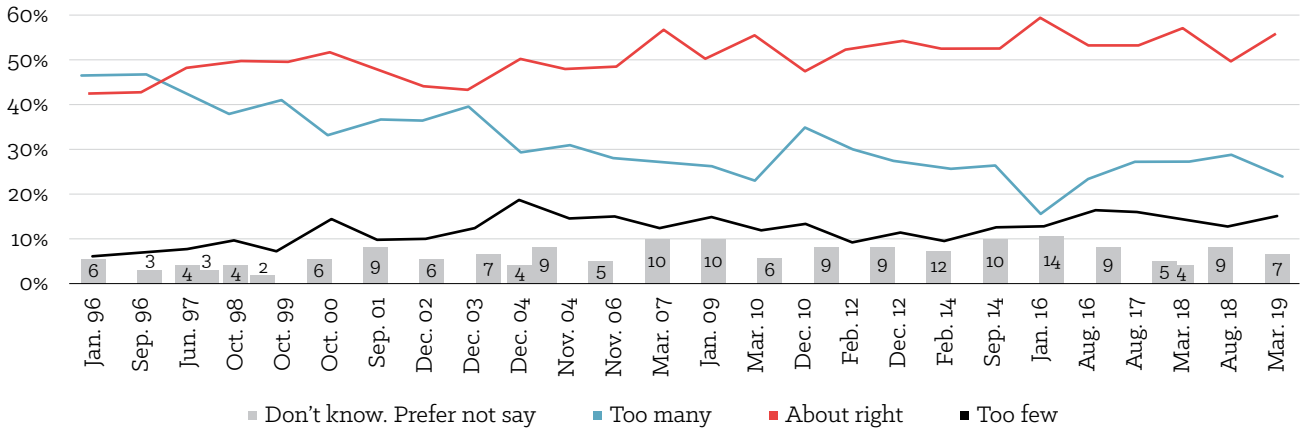
With the onset of the pandemic in March 2020 there were significant declines in the numbers of immigrants in Canada (as seen in Table 1). The reductions appeared in line with the sentiment of most Canadians that felt there was a need to reduce the numbers of immigrant numbers in light of the global spread of the pandemic. In this regard, a survey conducted by Leger Marketing for the Association for Canadian Studies in July 2020 (Jedwab, 2020) reveals that Canadians were divided when asked whether they supported yet further increases to levels of immigration (a preamble to the question indicated that there had been reductions in the number of immigrants admitted to Canada over the months prior to the survey). Nonetheless, when asked about immigrants' role in Canada's longer-term economic recovery, some 61% said that they would help the recovery compared with 22% that believed they would hurt the recovery (and 18% saying that they didn't know).

Qualitative research aimed at further probing Canadian views around immigration during the pandemic conducted by IPSOS for IRCC confirms that most Canadians view immigrants as making a positive contribution to the economy. IPSOS focus group participants frequently cited the benefits of newcomers in general and in reflecting on the pandemic response mentioned newcomer contributions in support of essential services and long-term care homes. On the role of immigration in the COVID-19 recovery the focus group discussions tended to largely reinforce participants' pre-existing views towards immigration especially in reference to immigrants' contribution to the healthcare system. But this did not always translate into emphatic support for resuming levels of immigration (IRCC, 2020),

The quantitative segment of the IPSOS survey for IRCC confirmed some slippage in the percentage of Canadians reporting that the numbers of immigrants both current and projected were about right and a conversely a rise in the share that said that there were too many when compared with the 2004–2019 pre-pandemic average across the trend line calculated above.

The table below points to a ten-point increase over the 26.5% benchmark for the period in regards to the percentage reporting that the number of immigrants Canada intended to admit for 2021 were too many and a 6-point rise above that benchmark when asked whether the lifting of travel restrictions would yield for a return to pre-pandemic immigration levels (although the question did not specify the pre-pandemic number). It is worth noting that the questions posed by IPSOS

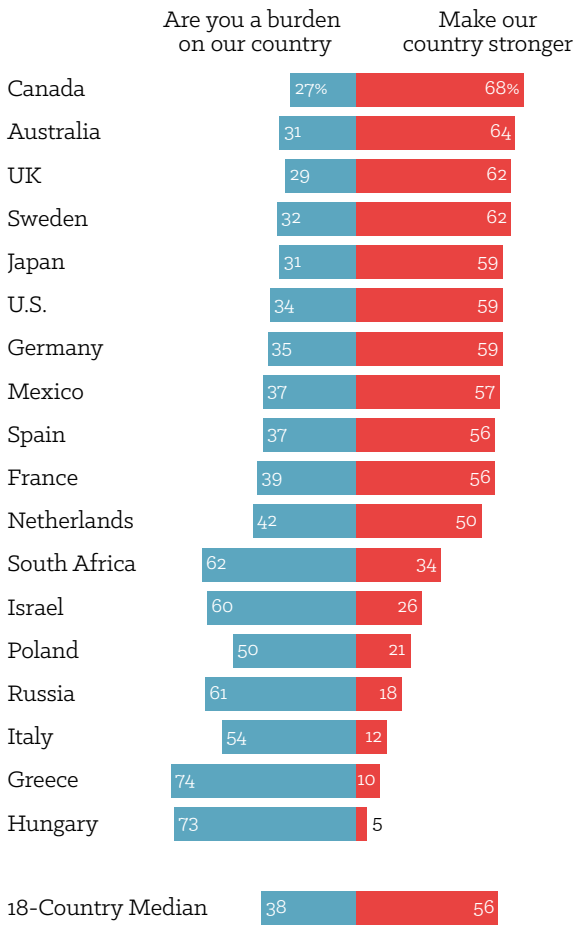
SURVEY 2. IN YOUR OPINION DO YOU FEEL THAT THERE ARE TOO MANY, TOO FEW OR ABOUT THE RIGHT NUMBER OF IMMIGRANTS COMING TO CANADA?



Source: Introduction to Immigration, Refugees and Citizenship Canada: Public Opinion Research on Canadians' Attitudes towards Immigration.

HALF OR MORE IN MANY DESTINATION COUNTRIES VIEW IMMIGRANTS AS A STRENGH

Immigrants today make our country stronger because of their work and talents OR immigrants today are burden on our country because they take our jobs and social benefits



Source: Soring 2018 Global Attitudes Survey. Q54a. "Around the World. More Say Immigrants Are a Strengh Than a Burden." PEW Research Center

for IRCC differ from the standard question about immigration levels. They nonetheless suggest that there were concerns about current and future levels of immigration expressed at that time. (See Table 2).

By the fall of 2021 public opinion surveys confirmed that, despite the pandemic, positive views about immigration were dominant amongst Canadians. A September 2021 poll conducted by the Environics Institute found that "a clear majority supported robust levels of immigration (which at that time exceeded pre-pandemic levels), viewed immigrants as good for the Canadian economy (80 percent agreed that the economic impact of immigration is positive) and believed that newcomers were important for growing the country's population (57 per cent agreed that Canada needed more immigration to increase its population)," The Environics Institute survey revealed that the majority of survey respondents (65%) disagreed with the statement that there is too much immigration to Canada (Environics, 2021).

IDENTITY ISSUES AND PUBLIC OPINION ON IMMIGRATION

Between 2020 and 2021, much attention was directed at the health and economic concerns as to their potential impact on approval or disapproval of immigration levels. But identity issues remained an important facet in public concerns around immigration even if they appeared less present in conversations around immigration in the first two years of the pandemic. Pandemic aside, in Quebec debates over the effects of immigration on the vitality of the French language were not much deterred by the focus on the contagion.

Underlying support or opposition to robust levels of immigration are anxieties about immigrant integration, fears over diversity and concerns about personal identities. Assumptions are often made that openness to immigration implies generally positive attitudes across the spectrum of diversity issues.

TABLE 2. DO YOU FEEL THAT WOULD BE TOO MANY, TOO FEW OR ABOUT THE RIGHT NUMBER OF IMMIGRANTS COMING TO CANADA?

Do you feel that would be too many, too few or about the right number of immigrants coming to Canada currently?	Canada aims to admit 401,000 immigrants as permanent residents this year, many of whom are already in Canada as temporary residents.	Once travel restrictions are lifted, if the same number of immigrants were to come to Canada as before the COVID-19....
Too Many	36%	32%
Too Few	7%	9%
About the Right Number	46%	43%
Don't Know	10%	16%

Source: Prepared for: Immigration, Refugees and Citizenship Canada by IPSOS, 2020–21 Annual Tracking Study/Final report
https://epe.lac-bac.gc.ca/100/200/301/pwgsc-tpsgc/por-ef/immigration_refugees/2021/019-20-e/Instrument_appendix.htm

This is revealed in the table below which makes it clear that those Canadians who believe that there are too many immigrants coming to the country are far more likely than others to want immigrants to give up their customs and traditions and considerably more worried about losing their culture than those Canadians who feel that Canada is admitting either the right number or too few immigrants. (See Table 3).

PUBLIC OPINION ON AFGHAN REFUGEES AND UKRAINIAN DISPLACED PERSONS DURING THE PANDEMIC

In response to the refugee crisis in Afghanistan, Canada evacuated roughly 3,700 people from the country and expanded its humanitarian program to welcome 20,000 refugees. Like many other refugee receiving countries, many Canadians watched the troubling events unfold in the evacuation process with a great deal of concern. The pandemic did not appear to have an appreciable impact on the extent to which Canadians and Americans were prepared to admit Afghan refugees in their respective counties. The IPSOS survey for IRCC (2021) saw most Canadians view the initial 20 000 Afghan refugees to be admitted as either too few (23%) or about the right number (51%), Some 14% of Canadians surveyed felt the number of Afghan refugees would be too many (well below the overall average share of Canadians that felt there were too many immigrants). Some 14% felt that they didn't know or preferred not to answer.

The support for admitting Afghan refugees was further confirmed in the Fall of 2021 with the results of a national survey conducted by Leger Marketing for the Association for Canadian Studies. It revealed that some 55% of Canadians expressed approval for allowing the then projected 20 000 Afghan Refugees to come to Canada and 53% agreed that Canada has a responsibility to accept refugees into the country (Leger-Association for Canadian Studies, August, 2021)

Similar sentiments about Afghan refugees were echoed by Americans as revealed in a CBS/YouGov poll where some 81% of Americans surveyed said the U.S. should help Afghans come to the U.S (Solender, 2021).

CONCLUSION: A TALE OF TWO DIVERGING MIGRATION NARRATIVES

The first year of the pandemic offered a clear demonstration of the importance of immigration for population growth in Canada as it did in the United States. Hence the reductions in immigration at the start of the pandemic saw record lows in Canada's population growth. Yet in both countries there remained a strong sense across the period 2020 and 2021 that immigrants made a positive contribution to the economy and that view was reinforced as Canadians and Americans observed the presence of immigrants on the front lines. Health concerns arising from the global spread of the pandemic were accompanied by border closures and international travel limits that served as the rationale for immigration reductions in 2020.

Afrouzi et al. (2022) contend that political leaders can change constituents' beliefs. Based on a large-scale survey on attitudes towards immigrants they confirm that leader messages matter. They maintain that leaders persuade when participants hear messages from sources perceived as reliable. Across the pandemic, Canadian policy makers maintained the position that immigrants were essential to post pandemic economic recovery and insisted as much in their public messaging. The consistent messaging assisted the federal government in restoring immigration levels well above the pre-pandemic numbers. By contrast the United States saw the reduced immigration numbers of 2020 continue into the next year and the message(s) around immigration were more ambiguous owing to the ongoing challenges associated with irregular migration on that country's southern border.

TABLE 3. IN YOUR OPINION, DO YOU FEEL THERE ARE TOO MANY, TOO FEW, OR ABOUT THE RIGHT NUMBER OF IMMIGRANTS COMING TO CANADA CROSS REFERENCES WITH SELECTED CONCERNS ABOUT IMMIGRATION.

Agree that/ Worry about	In your opinion, do you feel there are too many, too few, or about the right number of immigrants coming to Canada?			
	Too many	About the right number	Too few	**Diff too many vs too few**
Immigrants should be encouraged to give up their customs and traditions and become more like the rest of the Canadian population	58	24	12	**46**
…losing my culture	58	41	32	**26**

Source: Leger for the Association for Canadian Studies, March 10–18, 2021.

While both countries often describe themselves as nations of immigrants, the domestic discourse and respective geopolitics around immigration diverge in important ways that need to be considered when undertaking comparisons of public opinion around migration in Canada and the United States.

Examining the relationship between public policies around immigration and shifts in public opinion merits deeper analyses of the evolving identities and ideologies in both countries so as to better explain that which accounts for the differences between them.

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STRUCTURAL DETERMINANTS OF HEALTH AMONG IN-TRANSIT IMMIGRANTS THROUGH MEXICO DURING THE COVID-19 PANDEMIC: METHODOLOGICAL CHALLENGES AND FINDINGS

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INTRODUCTION

Structural determinants of health among Central American and Caribbean immigrants journeying through Mexico are usually associated with their status as outsiders and their need to seek shelter while they wait for their asylum requests in the US to go through. The COVID-19 pandemic brought additional hurdles for them, as shelters went into lockdown and the borders closed. This article goes over the most common structural determinants of health that in-transit immigrants had to face during their long wait in Mexico and the methodological challenges that had to be overcome while conducting research in a pandemic-ridden country.

Most of the source material for this article comes from the *COVID-19's differential impact on the mental and emotional health of Indigenous Peoples and Newcomers: A socioeconomic analysis of Canada, US and Mexico* research project, funded by the Canadian Institutes for Health Research (CIHR) through the University of Manitoba, whose fieldwork phase in four Mexican border cities took place during 2021.

MEXICO AND THE IMPACT OF THE PANDEMIC ON IMMIGRATION

While the pandemic worsened the living conditions and chances of those seeking asylum in the US, most in-transit immigrants in Mexico were already directly affected by the Migrant Protection Protocols (MPP) that were in place between January 2019 and June 2022. This "remain-in-Mexico" policy suspended the right of asylum to any migrant crossing the US-Mexico border outside of the official ports of entry (US Government, 2018). Furthermore, the MPPs allowed the US Government to release asylum claimants to Mexico in order for them to wait for their hearings in the US. By July 2019, the Department of Homeland Security and the Department of Justice announced that those who had not previously applied for asylum in one of the countries that they had to traverse would not be eligible to request asylum in the US; this rule went into effect by September 2019 (Kocher, 2021).

With the arrival of COVID-19, the US-Mexico border was closed to nonessential traffic in an attempt to stop the spread

of the virus, this situation further slowed down the asylum process and things worsened up with the implementation of US Title 42, a public health regulation that allowed for the quick deportation of asylum seekers who presented themselves at a port of entry without due process, with exceptions made for unaccompanied minors, victims of torture, parents with newborns, pregnant women and individuals with special needs (Fabi, Rivas & Griffin, 2022).

STRUCTURAL DETERMINANTS OF HEALTH AMONG IN-TRANSIT IMMIGRANTS IN MEXICO

The onset of the pandemic "strained local resources for basic necessities including food and temporary shelter" (Brito, 2020: 1), which resulted in the overcrowding of all of the migrant shelters in the region and the emergence of improvised encampments on the streets (Calderón-Villareal, Terry, Friedman, González-Olachea, Chavez, López & Bourgeois, 2022).

In this regard, few in-transit immigrants had access to healthcare, as this was dependent on whether they were staying at a shelter that could provide it. If they were inhabiting an improvised encampment, the only way in which they could obtain healthcare was to be present when an NGO visited their location to provide aid. On the other hand, a limited number of individuals were able to attain refugee status in Mexico, allowing them to officially apply for jobs and thus making them eligible to get healthcare as per Mexico's laws (Cruz & Ibarra, 2022).

Considering how the agentic capacities of a given community are a reflection of the interaction between power and control (Dutta, 2016), another structural determinant of health has to do with the level of agency that in-transit immigrants have in Mexico, as they are mostly at the whim of the power dynamics operating in the US-Mexico border region and in their specific living spaces. We confirmed this during the interviews conducted for the research project, as all of them mentioned how, for instance, they were willing to obey every single sanitary measure, including vaccination mandates, in an attempt to reduce the risks of being denied asylum or getting deported (Cruz & Ibarra, 2022). An extensive report on these findings can be found on the previously cited paper.

METHODOLOGICAL CHALLENGES DURING THE PANDEMIC

By mid 2021, when our fieldwork phase started, most migrant shelters were in deep lockdowns, some of them even cutting off contact from the outside world altogether. Our starting goal was to get 40 to 50 in-depth semi-structured interviews, evenly distributed among these four border cities.

Virtual interviews were out of the question, as most of our potential interviewees were on the streets and/or at improvised encampments. In order to tackle this situation, we had several options: either we waited for any of the shelters to ease off on their restrictions or we could go out by ourselves onto the streets. We decided for the latter, combined with snowball sampling, since we had recently worked on other projects related to immigration, and unsurprisingly it worked very well, in fact many of the interviews that we were able to set up first were booked thanks to taking advantage of previously established networks and this technique.

As for the streets, we started to learn and walk areas with nearby encampments, sometimes several times a day and, after careful observation, we decided if we could approach a person and introduce ourselves, with the intention of establishing as much rapport as possible in such a short time. After this step, it became easier to determine if the individual could be a potential interviewee. Once we were greenlit to do an interview, we decided to conduct it in any of the cafes or restaurants in the area, as being free from the gaze of the authorities made most interviewees more comfortable. We learned this the hard way when we were conducting interviews for another project in the premises of the National Institute of Migration, where many of the interviewees were very careful as they thought that their answers could deter their asylum request process.

In the end, we were able to conduct 57 interviews, which in turn allowed us to identify five recurring narratives that allowed us to infer how COVID-19 affected the mental health of the in-transit immigrants that we were able to interview: 1) The pandemic's psychological impact, referring to those cases in which the sanitary contingency was directly related to their mental health. 2) The uncertainty of being stranded in Mexico and the long wait. 3) Fear of violence over fear of contagion. 4) The perceived leniency of Mexico with the pandemic when compared to their countries of origin, and 5) Beliefs about the pandemic and vaccines. As previously mentioned, an extended report on these results can be found in the following publication: *A narrative-based approach to understand the impact of COVID-19 on the mental health of stranded immigrants in four border cities in Mexico* (Cruz & Ibarra, 2022).

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WEAVING THE PAST TO THE PRESENT: INDIGENOUS TRUST DURING THE COVID-19 PANDEMIC

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INTRODUCTION

The COVID-19 pandemic brought significant changes to lives around the world; however, to call it an "equalizer" is misrepresentative (Mein, 2020). Due to historical context, socioeconomic status and discrimination, certain groups found themselves particularly vulnerable throughout the pandemic (Statistics Canada, 2020). This paper investigates how relationships of trust affected Indigenous Peoples in Canada during the pandemic. We propose that trust played a significant role in Indigenous Peoples' pandemic experiences and health outcomes. However, before we can understand the pandemic's implications and potential areas of policy change, it is necessary to place the current concerns within a broader context. The health disparities among Indigenous Peoples compared to non-Indigenous Peoples in Canada are directly tied to the historical and political contexts and ongoing colonialism (Allan & Smylie, 2015; Gunn, 2016).

SETTLER COLONIALISM: PLACING THE PRESENT WITHIN THE CONTEXT OF THE PAST

For Indigenous Peoples, colonialism is not a thing of the past, some historical event, a page to be turned, or a long-forgotten chapter in a history book. Rather, colonialism is ongoing as Europeans came, settled, and have not left what is now known as Canada. Colonialism continues as an everyday reality as it has is woven into the fabric of the Canadian state—through its structures, systems, and institutions (Lowman & Barker, 2015; McCallum & Perry, 2018; Wolfe, 1999, Wolfe, 2006; Woolford, 2014; Woolford & Gacek, 2016). Western values, norms and institutions were imposed on Indigenous Peoples as the church and state moved to remove Indigenous peoples from their territories and to destroy Indigenous institutions, ways of being, understanding, and doing. We must not forget that arriving settlers brought (and often systematically spread) diseases from Europe which for generations resulted in multiple pandemics and decimated (even eliminated) Indigenous nations (Daschuk, 2013; MacIntosh, 2017; McCallum & Perry, 2018).

Though the Canadian government talks about renewed relationships and reconciliation with Indigenous Peoples, colonial structures, policies, and laws (such as the Indian Act) remain in place (Lowman & Barker, 2015; McCallum & Perry, 2018; Wolfe, 1999, Wolfe, 2006; Woolford, 2014; Woolford & Gacek, 2016). These historic and ongoing processes of colonialism create and sustain societal inequalities, systemic institutional racism and sustained intergenerational traumas which are most often attributed to or measured as social determinants of health: namely, lack of access to basic needs such as housing, food security, employment and education (Allan & Smylie, 2015). They also contribute to decreased trust in government institutions and public services.

BARRIERS TO HEALTHCARE

Historical and ongoing colonial processes create barriers for Indigenous communities and individuals when attempting to access healthcare in Canada (George et al., 2019; McCallum & Perry, 2018; Nelson & Wilson, 2018; Wylie et al., 2019). Barriers to adequate healthcare services for Indigenous Peoples include inadequate funding for services, poverty, housing, individual and systemic racism and social exclusion, not to mention a distinct lack of culturally inclusive training for healthcare practitioners (McCallum & Perry, 2018; Nguyen et al., 2020). For example, Indigenous Peoples in urban areas are frequently denied care or experience discrimination during treatment (MacIntosh, 2017; McCallum & Perry, 2018). Whereas, for Indigenous Peoples on reserve or in remote communities, healthcare remains inaccessible mainly due to geographic location and availability of services (Nguyen et al., 2020; Wylie et al., 2019). To this we can also add the complex patchwork that finds a maze of differential coverage (and different sources of coverage) for Indigenous Peoples. While the latest case law establishes that the federal government has primary constitutional responsibility for First Nations, Inuit, and now Métis, the First Nations and Inuit Health Branch only offers coverage and services for status First Nations and Inuit—and this within limited geographical and bureaucratic contexts. Provincial/federal disputes over responsibility for services to Indigenous patients led to the institution of Jordan's Principle in order to compel governments to give priority to servicing patients and save jurisdictional squabbling for after the fact (see Blackstock et al., 2005).

Before COVID-19, the successive generations of underfunding of social services for Indigenous peoples, and the jurisdictional refusal to address gaps responsibly, resulted in a patchwork system of under-funded and under-serviced healthcare for Indigenous peoples. Needless to say, the systemic crisis of Indigenous healthcare became even more critical, and compounded, during the pandemic. While reconciliation and the pandemic have started to make this crisis visible, and public pressures are increasing for reducing the inequality gap between Indigenous and non-Indigenous communities, COVID-19 has also exacerbated the issue for Indigenous Peoples as they have confronted a lack of services, chronic underfunding, systemic racism and jurisdictional refusal in the healthcare system.

OVERLOOKED BY THE SYSTEM

The Canadian healthcare system appears as an inclusive environment where individuals in need of medical care receive it regardless of circumstance, but that does not always happen (Goodman et al., 2017). The case of Brian Sinclair, an Indigenous man in his 40s who died after waiting 34 hours in a Winnipeg ER waiting room, is one such case of Indigenous

Peoples being overlooked when seeking treatment due to the assumptions and stereotypical notions held by non-Indigenous healthcare practitioners and the general public. The inquest into Sinclair's death brought more attention to the racism and discrimination inherent in Canadian healthcare institutions (Provincial Government of Manitoba, 2014; Brian Sinclair Working Group, 2017; Provincial Implementation Team, 2015; Geary, 2017). The media has many articles about the mistreatment and racism directed at Indigenous Peoples who engage with the healthcare system. However, for many other Indigenous Peoples, inquests were denied.[1] The contemporary controversies concerning medical care for Indigenous Peoples are not isolated and they have not disappeared with increasing public awareness and the arrival of discourses of reconciliation. Never has this been clearer than in the cellphone video documenting the racist attitudes and refusal to provide treatment to Joyce Echaquan in Joliette, Quebec as she lay dying in September 2020. Echaquan's death came one year after the release of the final report from the Viens Commission in Quebec, which conducted a public inquiry into the relationship between public services and Indigenous Peoples in the province. In the section on health services, Justice Viens (2019) observed that "many voices were heard to state that First Nations members and Inuit feel unsafe when they have to entrust their health to public services" (p. 368).

These are not isolated events. As a result, many Indigenous Peoples feel they can neither trust the healthcare system or trust the government to address the systemic racism that inherent in the healthcare system.

WHO SHOULD BE TRUSTED? WHY DOES THIS ALL MATTER?

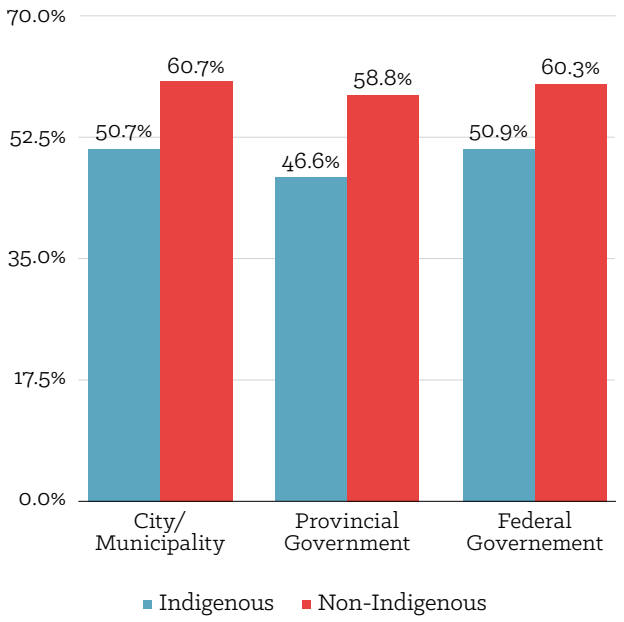
Trust is both difficult to measure and difficult to define. Yet, we all know how it feels when it is absent or lost. It is considered a fundamental element of any functioning society. Trust in public institutions and government is vital to social and economic progress and social order. The Organization for Economic Co-operation and Development (2017; 2019) defines trust as an individual's belief that other people, communities, or institutions will treat them or act in a positive manner. Some argue that institutions or people who are in a position to be trusted make societies successful (Nikolakis & Nelson, 2019). Furthermore, the strength of general trust can be seen as an indicator of social and economic success in communities fostering cooperation and stability (Fukuyama, 1996).

Indigenous Peoples' lack of trust in Canadian institutions is due to historic and ongoing forms of colonialism and discrimination (Vogel, 2015; Hwang, 2017). Through Canada's ongoing reckoning with its history of abusive and assimilative institutions, historians, the TRC, and class action lawsuits have brought to light a stark history of involuntary medical and malnourishment experiments and abuses perpetrated against Indigenous Peoples in both educational and medical settings (Dangerfield, 2018). In the contemporary context, a critical step for building trust among the general population is to address the political and social issues that can help eradicate discrimination against Indigenous Peoples (Hotte, 2020). Broadly, Canadians show a high level of trust in their healthcare system and its associated professionals, including nurses and doctors (Newswire, 2022). However, that changes when we look at Canada's Indigenous population. When looking at those numbers, we see that Indigenous Peoples distrust Canada's medical establishment because of its contributions to increased health inequalities compared to the rest of the non-Indigenous population (Vogel, 2015).

Our survey data indicates Indigenous Peoples have less trust in government compared to the non-Indigenous population. Figure 1 shows that Indigenous Peoples trust their provincial government the least (46.6%), while their non-Indigenous counterparts have a higher rate of trust (58.8%). Indigenous Peoples' trust increases to 50% for both municipal and federal governments. As expected, the non-Indigenous population has a higher level of trust in all levels of (settler) government (58–60%) than do Indigenous Peoples.

Our data also shows that trust in local, provincial, and federal governments is moderate and increases toward public health officials. We also see that Indigenous People's trust

FIGURE 1. TRUST LEVELS IN GOVERNMENT, INDIGENOUS AND NON-INDIGENOUS COMPARED, WAVE 4 (N-2765).



1 For more detailed stories see Baxter, 2022; Lampa, 2022; Maxwell, 2022; Roberts, 2022; Petz, 2022.

in their tribe/band/nation's government differs by region. Indigenous peoples in all the regions except the Prairies and the Maritimes have a 64–70% trust in their tribe/band/nation. This is higher compared to the prairies (52.5%) and lower than the Maritimes (89.7%). These statistics show that Indigenous Peoples' trust in non-Indigenous institutions is lower than in their trust in their own community/band/nation governments. It also suggests the need for additional research on the regional differences in trust in Indigenous governments across Canada.

The fact of the matter is that, while Indigenous Peoples have been pervasively victimized by an entire history of discriminatory and assimilative treatment in Canadian institutions, *trust itself* is also a victim of colonialism. Trust in institutions and their services, or trust in governments, will be harmed by ongoing service problems for Indigenous Peoples as well as by the history of betrayals and the continuing (but necessary) revelation of these controversies. This gives some context to higher levels of mistrust expressed by marginalized groups to medical services such as vaccines. This can be seen in Figure 4, with Indigenous and Black respondents in Canada expressing a somewhat higher rate of agreement, when compared with other groups, with the statement that all vaccines are dangerous. Similarly, in Figure 5, Indigenous respondents demonstrated lower intentions to vaccinate against COVID-19

FIGURE 2. LEVELS OF TRUST IN TRIBE/BAND/NATION BY REGION WAVE 4 (N-633).

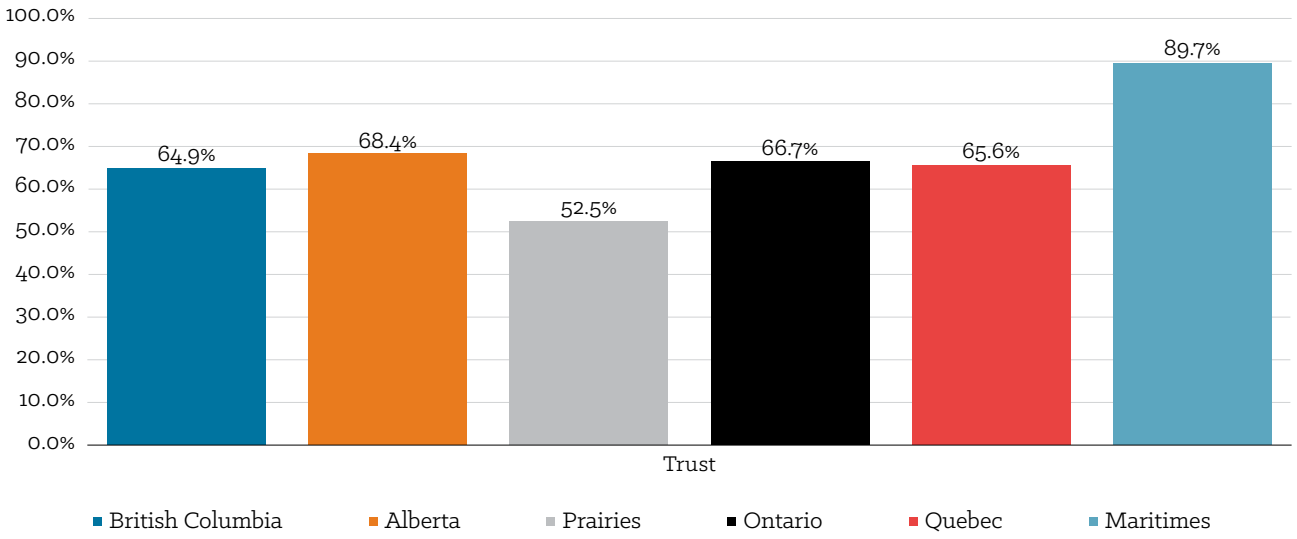
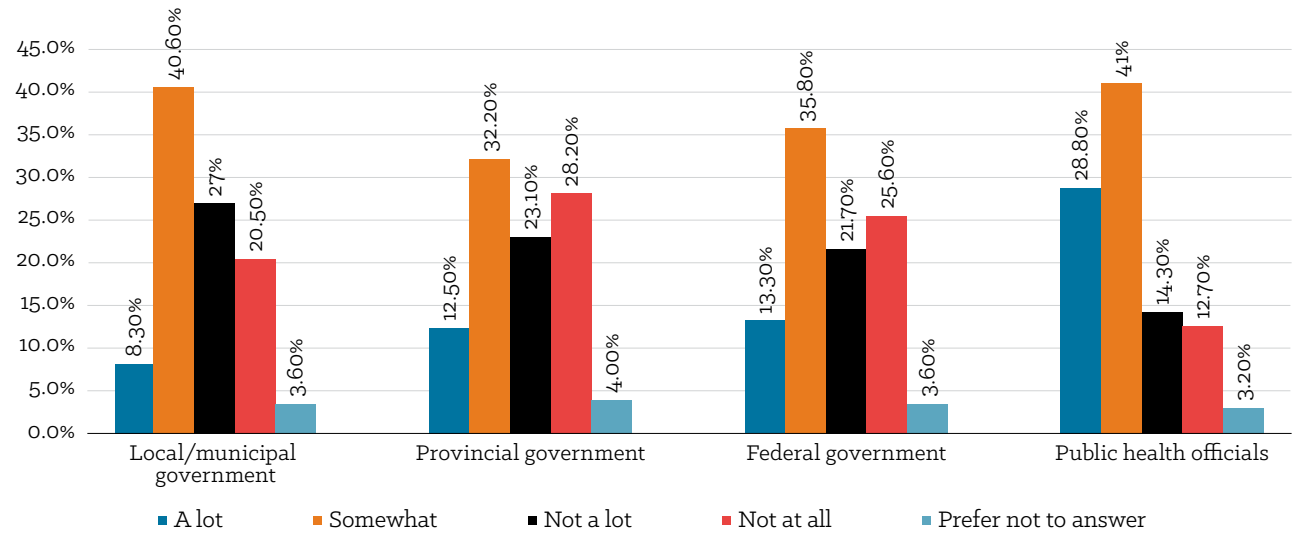


FIGURE 3. INDIGENOUS PEOPLES TRUST IN LEVELS OF GOVERNMENT AND HEALTH OFFICIALS WAVE 4 (N-503).



when compared with non-Indigenous respondents in Canada, although both groups' intentions to obtain the vaccine increased from October 2020 to March 2021.

CONCLUSION

Factors such as geographical location, differences in the funding of healthcare services (by Indigenous group or across the on-reserve/off-reserve divide), the persistent federal underfunding of Indigenous health, and discrimination within the Canadian healthcare system all pose barriers to Indigenous Peoples seeking treatment. By understanding these factors and reflecting on the actions of federal and provincial governments—past and present—we are better situated to address the disproportional effect of the COVID-19 pandemic on Indigenous Peoples and their health and well-being.

Reading contemporary data relating to the Indigenous experience of the COVID-19 pandemic, however, suggests that trust is also a key pathway to addressing systemic inequalities in services to Indigenous peoples. Our research shows that Indigenous respondents reported having moderate trust in all three levels of government and public health officials, which is less trust than non-Indigenous respondents reported. The data highlights the need to focus on the meaning of trust and how it can be built between Indigenous Peoples, the government, and healthcare institutions. Addressing the disparities within the western healthcare system, increasing awareness of racism and mistreatment, and listening to the needs of First Nations, Métis, and Inuit Peoples are the first steps toward reducing health inequalities experienced by Indigenous Peoples in Canada and increasing Indigenous trust in health institutions. Indeed, trust and service efficacy are likely mutually dependent and mutually reinforcing.

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FACTORS AFFECTING VACCINE UPTAKE: CANADA AND THE UNITED STATES COMPARED

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INTRODUCTION[1]

When COVID-19 vaccination campaigns began in 2021, there were many questions regarding countries' rollout plans, eligibility, and vaccine safety (Christakis, 2020; Fafard et al. 2021). As vaccine rollout expanded over time, different provinces and states used different strategies and initiatives to encourage vaccination. In this paper, we briefly discuss vaccination rates in Canada and the United States as of August 2022, explore the demographics of who has been vaccinated and compare the two countries' rollout strategies. By doing this, we increase the understanding of how different factors affect vaccine uptake as well as vaccine hesitancy.

Additionally, this work contributes to future vaccination campaigns - as we know COVID-19 will not be the last pandemic.

VACCINATION RATES IN CANADA AND THE UNITED STATES

According to the Government of Canada (2022b), as of July 17, 81.9% of the total Canadian population has been fully vaccinated (received at least two doses or one dose depending on the vaccine type). When including only the Canadian population 5 years and older, the percentage rises to 86.2% due to older age groups having earlier access to vaccines (Government of Canada, 2022b; Government of Ontario, 2021). Among Canadian children 5 to 11 years old, 42.4% are fully vaccinated and this low percentage can be explained by children having later access to vaccines (Government of Canada, 2022b; Mervosh, 2021). In the United States, as of July 27, 2022, 67.2% of the total US population has been fully vaccinated (Centers for Disease Control and Prevention [CDC], 2022c). Among the US population 5 years and older, the percentage also increases slightly to 71.5% and decreases to 30.3% for children 5 to 11 years (CDC, 2022c). Based on these numbers, Canada has a higher percentage of its population fully vaccinated than the United States.

Canada also shows less variation in vaccination levels among its provinces and territories than the United States does among its states. The Canadian province or territory with the highest percentage of its population fully vaccinated is 92.6% while the lowest is 74.7% (Government of Canada, 2022b). The range between these two provinces/territories is just under 18.0%. In the United States, the state with the highest percentage of its population fully vaccinated is 84.5% while the lowest is 51.7% (CDC, 2022d). The range between these two states' vaccination levels is over 32.0%. This suggests that there is more variation in vaccination rates in the United States than in Canada. This result may be explained by greater political division in the United States than in Canada (Dimock & Wike, 2020).

DEMOGRAPHICS OF THE VACCINATED AND UNVACCINATED IN CANADA AND THE UNITED STATES

Looking at vaccine hesitancy by race/ethnicity and Indigeneity in Canada and the United States, some differences appear. Asian Canadians and Asian Americans were the most likely to indicate they are fully vaccinated (97.20% and 88.8% respectively), while Black Canadians, Black Americans and Indigenous peoples were the least likely to indicate they were vaccinated in both countries. For some racialized groups, the reported decrease in willingness to get vaccinated can be attributed to a long history of medical experimentation by the government and healthcare system, resulting in mistrust (McKenna, 2020; Twohey, 2021). However, these groups have a higher risk of severe illness from the virus (Mude et al., 2021; Mosby & Swindrowich, 2021). The largest disparity among one ethnicity in Canada as compared to the United States is Indigenous and American Indian or Alaska Natives with Indigenous respondents in Canada being over 20.0% more likely to be vaccinated than Indigenous respondents in the United States.

In general, older age groups have higher vaccination rates than younger age groups. COVID-19 posed increased health risks to older individuals; therefore, when vaccines became available, older age groups received priority (CDC, 2022e; Government of Ontario, 2021). In Canada, 95.0% of individuals 50 years and older are fully vaccinated (Government of Canada, 2022b). For Canadians between the ages of 18–49, 87.4% are fully vaccinated and among those 12–17, 83.89% are fully vaccinated (Government of Canada, 2022b). In the United States, the same trend is seen but overall, with lower rates of full vaccination. For Americans 50 years and older, 87.1% are fully vaccinated, for those ages 18–49 it is 69.1%, and for children ages 12–17 it is 60.2% (CDC, 2022d).

The data we collected is consistent with the national data trends of vaccination rates overall being higher in Canada than in the United States and older age groups have higher vaccination rates than younger age groups. We also found that there were fewer disparities among the age groups in Canada than in the United States. In Canada, the reported rates of full vaccination by age group ranged from 82.3% to 91.0% creating a difference of under 9.0%. In the United States, the reported rates of full vaccination by age group ranged from 65.7% to 81.3% creating a gap of over 15.0%. The gap between the age groups with the highest and lowest rates of full vaccination was larger in the United States reported responses than in Canadian responses.

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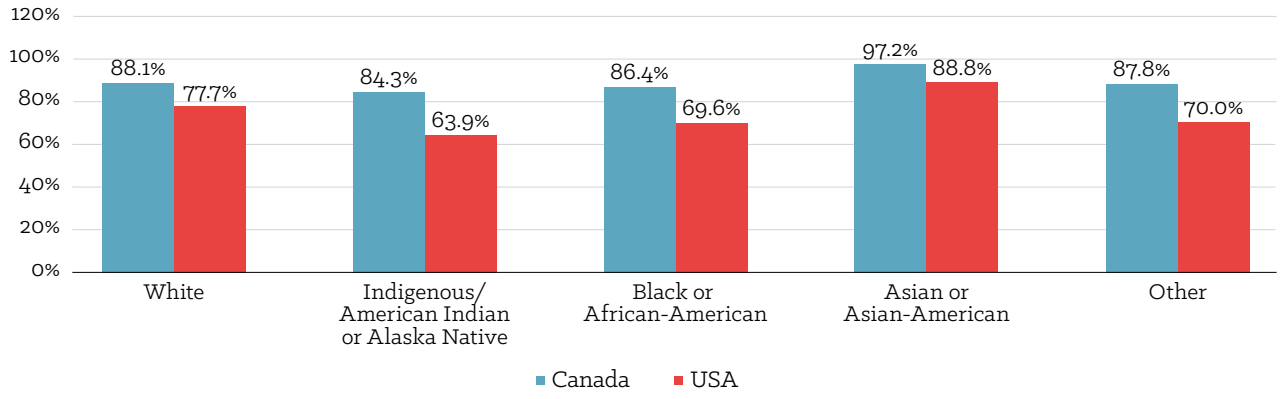
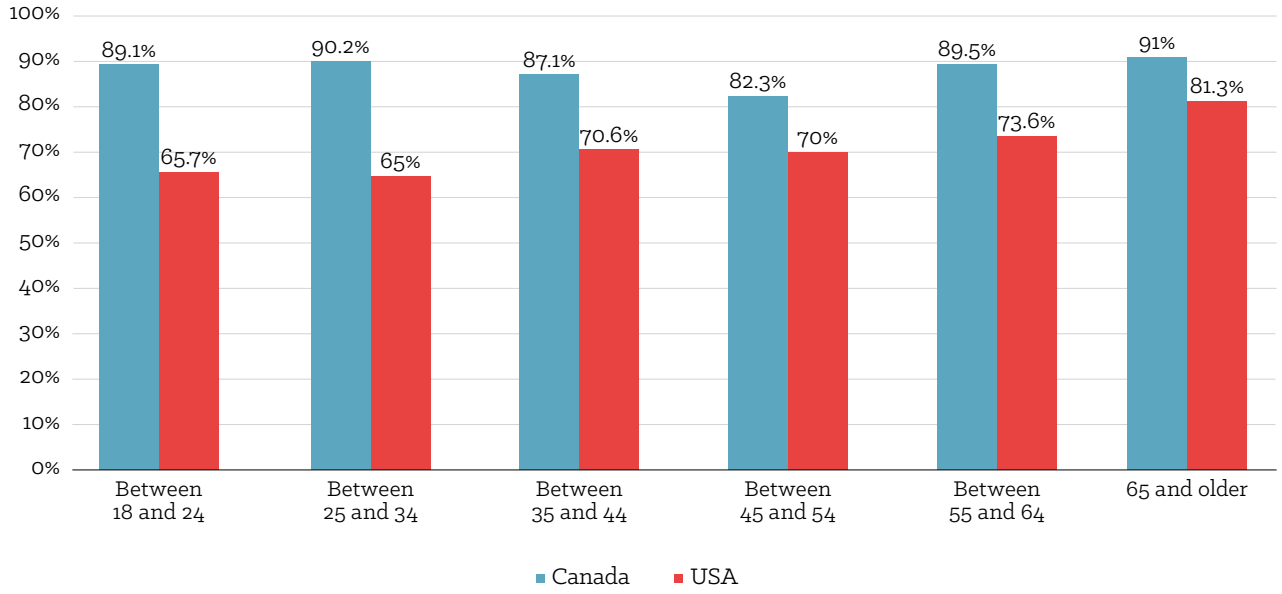
FIGURE 1. VACCINATION RATES IN CANADA AND THE UNITED STATES BY ETHNICITY.



Sources: Data collection: March 21, 2022. N = 6600.

FIGURE 2. VACCINATIONS BY AGE IN CANADA AND THE UNITED STATES.



Sources: Data collection: March 21, 2022. N = 6600.

BOOSTER UPTAKE IN CANADA AND THE UNITED STATES

The effectiveness of COVID-19 vaccines has shown to wane over time, therefore 3rd and 4th doses (i.e., boosters) have been recommended to increase immune protection against the virus and reduce severe illness (Ontario Ministry of Health, 2022). The percentage of Canadians between the ages of 18–49 years that have received their first booster dose is 44.5% (Government of Canada, 2022b). In the United States, the percentage of Americans between 18–49 years that have received their first booster dose is 27.3% (CDC, 2022d). For Canadians ages 50 and older, the percentage increases to 79.4% and for Americans, it also increases to 55.1% (Government of Canada, 2022b; CDC, 2022d). In terms of the second booster dose, the percentage of Canadians ages 50 and older who have received their second booster shot is 33.7% and for Americans, it is 18.35% (Government of Canada, 2022b; CDC, 2022d). These numbers indicate that uptake in booster doses in Canada and the United States is low compared to uptake for the two initial doses, but in Canada uptake in booster doses is higher than in the United States.

The low uptake in COVID-19 booster doses in Canada and the United States can be attributed to a few reasons. First, being "fully vaccinated" and having proof of vaccination was a

requirement in Canada and the United States for many workplaces, airlines, and other public places, however, booster doses were often only a recommendation (CDC, 2022a; Gollom, 2021; McKendrick, 2021; Ontario Ministry of Health, 2022). This may have caused people to feel reluctant to receive booster doses. The later approval and eligibility of vaccines for younger age groups also limited some from getting booster doses (Mervosh, 2021; Government of Ontario, 2021). While the CDC (2022b) now recommends a first booster dose to anyone 5 years and older, they only recommend a second booster dose to individuals 50 years and older and immunocompromised individuals. Regarding the first booster dose, younger age groups overall received their two initial doses comparatively later and may have not had enough time pass (at least 5–6 months between the initial doses and the first booster dose is recommended) to be eligible for their first booster dose (CDC, 2022b; Government of Canada, 2022a). For the second booster dose, while eligibility varies by region (in some places it is 18 years or older while in other places it is 50 years or older), many younger age groups are currently ineligible (Benchetrit, 2022).

VACCINE ROLLOUT IN CANADA AND THE UNITED STATES

Overall, vaccine rollout in both Canada and the United States was similar. While each province/territory and state created their rollout phases, vaccines were prioritized for frontline and healthcare workers, residents of long-term care facilities that have been subjected to COVID-19 outbreaks (Statistics Canada, 2021), individuals at risk due to their age, those who are immunocompromised and Indigenous communities (Chabin et al., 2021). Indigenous communities in both countries also organized vaccination clinics and vaccine rollouts for their communities (FNHA, 2021; Powder, 2021). Following the initial priority groups, eligibility expanded often by age group, although continuing the focus on the marginalized and immunocompromised populations (Chabin et al., 2021).

In Canada, the province of Ontario's vaccine rollout plan was divided into three broad phases (Government of Ontario, 2021). Phase 1 began with getting "high-risk populations" vaccinated. High-risk populations included healthcare workers, Indigenous adults, and adults 80 years and older. Phase 2 added people with certain health conditions, people whose jobs demanded they work in person and individuals 55 years old and older. Finally, phase 3 included all others who were not previously eligible. Vaccines were delivered through many means such as hospital site clinics, mass vaccination clinics and pop-up clinics (Government of Ontario, 2021).

In the United States, the Californian county of San Diego's vaccine rollout plan was divided into two phases with the first phase broken up into lettered phases (Government of San Diego County, 2021). Phase1A aimed at vaccinating hospital staff, homecare providers and other medical staff. Phase 1B added those 75 years and older, then 65 and older and people at risk due to their occupation. Phase 1C included those with certain medical conditions and disabilities that would put them at risk, people living in congregated settings (i.e., correctional settings) and public transit workers. Phase 2 in Spring 2021 was added for those 50 and older, then 16 and older and later 12 and older (Government of San Diego County, 2021).

VACCINATION CAMPAIGNS, AND OTHER FACTORS AFFECTING VACCINATION RATES

Prior research into vaccination efforts indicates that financial incentives are a moderately effective method to increase vaccination rates (Duong, 2021; Labos, 2021). However, they remain a questionable approach as vaccination should be seen as an effort to increase herd immunity rather than increase the material gain (Campos-Mercade et al., 2021). Each country approached vaccine rollout differently, and even within some countries, different strategies produced different results. In the US, vaccine lotteries were created in several states and President Biden encouraged states to award $100 to individuals who received COVID-19 vaccinations (Labos, 2021). In Canada, several provinces, including Manitoba, Alberta and Quebec created vaccine lotteries to encourage vaccination (Jonas, 2021; Province of Manitoba, 2021; Dubé et al., 2022). These lotteries include monetary awards and scholarships to encourage the younger population to get vaccinated (Province of Manitoba, 2021).

Monetary incentives, however, were not the only type of incentives used to increase COVID-19 vaccinations. Some states had even more creative solutions. In New York, receiving the vaccine led to free tickets to baseball games and free transit for a week (Boynton, 2021). In New Jersey, a campaign called "Shot and a Beer" was held where receiving one dose of a COVID-19 vaccine led to a free beer at participating businesses and in Maine, the "Shot to Get Outdoors" campaign gave vaccinated individuals a free hunting and fishing license at their parks (Boynton, 2021). Additionally, many places offered free transportation to vaccination sites through arrangements with transport companies (Boynton, 2021; MacLean, 2020). Non-monetary incentives were also present in Canada where getting vaccinated led to freebies and discounts (Deschamps, 2021).

In Canada, the enactment of vaccination mandates doubled vaccination appointments in British Columbia, Ontario, and Quebec, especially when they became required for access to indoor public spaces and travel (Duong, 2021). In Manitoba, many indicated that receiving information regarding the vaccine was a significant factor in their decision to receive the vaccine (Duong, 2021).

CONCLUSION

The comparison of Canada and the United States allows for the examination of how the two countries' vaccination efforts and uptake resemble and differ from one another. Overall, our research found that vaccine uptake is higher in Canada than in the United States, there is less variation in vaccine uptake in Canada than in the United States, and there are differences across demographic factors such as age, race/ethnicity, and Indigeneity. Our findings are consistent with existing literature on vaccine hesitancy regarding the racialized groups who are most and least likely to be vaccine-hesitant. The groups that are more likely to be vaccine-hesitant (Black Canadians/Americans and Indigenous/American Indians) are also at a higher risk of being infected with COVID-19 and have higher mortality rates than general populations (Mude et al., 2021; Mosby & Swindrowich, 2021). Efforts to vaccinate vulnerable populations in supportive and understanding ways should continue while future research should focus on additional factors that affect vaccine uptake, including the role of geographical location, political affiliation, and income markers.

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